Office Management

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Preface

Twenty years have elapsed since the publication of the first edition of this book. During this period office management has won ever increasing acceptance as an essential and productive function in countless business organizations, so that today the office manager is generally recognized as an executive and the head of a department that is as important to the success of the company as are the finance, the sales, and the production departments. To be sure, much remains to be done in order that he may secure everywhere the status that the importance of his work warrants. In the last decade particularly, however, very substantial progress has been made in this direction.

Office Management covers both principles and methods. The present edition deals with the same basic subjects that were covered in the first two editions, but the discussion has been completely revised and brought up to date. Many new illustrations of specific procedures and methods used by representative companies have been added, so that virtually all the material represents the current practice of well-known, progressive companies. Thus it is hoped that this edition, like the two preceding it, will be equally valuable to business executives, office managers, teachers, and students.

The choice of the subject matter of the various chapters has been determined in every case by the relation that the work of the office manager holds, in everyday practice, to the particular matter in hand. For example, the organization, work, and methods of the stenographic, filing, mailing, and messenger departments are covered in considerable detail, but the chapters dealing with the work of the business departments treat primarily those phases of the work in which the office manager has some functional interest, such as record-keeping methods and personnel.

Because of the very close relation existing between many of the subjects discussed, specific references are not given for each chapter. Instead, a condensed bibliography of books, magazines, and other

material on the subject of office management as a whole is given after the last chapter.

In dealing with a field in which so much important work has been done in recent years and so much material published, it is impossible to give credit to all who have contributed to the making of this book. Particular acknowledgment, however, is due the National Office Management Association, the American Management Association, the Life Office Management Association, and the Controllers Institute of America; the publishers of *American Business, Office Management and Equipment, The Office*, and many other business periodicals; the McGraw-Hill Publishing Company and other publishers, for the use of material published by them; and the Policyholders Service Bureau of the Metropolitan Life Insurance Company.

Special acknowledgment is due Mr. George W. Oliver, Jr., Office Manager, Crucible Steel Company of America, and my associate, Mr. Ernest de la Ossa, Director of Personnel, National Broadcasting Company, for their work on the current edition. Both have made valuable contributions; the former in connection with Chapters 1–19, the latter with respect to Chapters 20–24. As a matter of fact, without their assistance the revision of *Office Management* would not have been possible at this time.

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JOHN H. MACDONALD

Contents

CHAPTER PAGE

1. THE PROFESSION OF OFFICE MANAGEMENT 1

Scope of the office manager's responsibility; Growing importance of office management; The place of the office; Increasing use of records; Professional status of the office manager; Qualifications of an office manager; Thorough knowledge of, and experience in, business; Tact and good judgment; Sales ability; Resourcefulness; Methodicalness; Thorough understanding of the term "service"; Leadership.

2. ORGANIZATION AND THE WORK OF THE OFFICE MANAGER . . . 12

The five basic divisions of business; The office as a productive activity; Organization; Management; Scientific management; System; Types of business organizations; Types of office organizations; Advantages and disadvantages of centralization; Combining centralized and departmental types; The place of the office manager in the organization; Work simplification.

3. SELECTING AN OFFICE SITE 32

Importance of proper location; Basic considerations; Erecting a new building; Renting an old building for exclusive occupancy; Occupancy of rented quarters; Selection of the location in the community; Neighborhood reputations; Forecasting future neighborhood changes; Nearness to service facilities; Convenience to employees; Advantages and disadvantages of suburban office location; Selection of the building itself; The rental-cost factor; Adaptability of space offered to layout; Character of other tenants in building; Selection of space within the building; Location of executive offices of a manufacturing company; Use of a weighted table to determine the best location; Features of an office lease; Moving the office to the new location; What to do on moving day.

4. PHYSICAL FACTORS IN OFFICE PLANNING 47

The importance of physical factors; Size and shape of the building; Building facilities; Coat rooms and lockers; Wash rooms; Storage facilities; Office lighting; Other factors affecting lighting; Color; Heating, ventilation, and air conditioning; Floors and floor coverings; Communicating systems; Partitions and railings; Noise-reducing facilities; Electrical facilities; Other physical factors; Office maintenance; Cleaning activity in Rockefeller Center, New York.

MAKING THE OFFICE LAYOUT . . . . . .

The importance of layout; Factors involved in office layout; Existing departmental divisions; Building around major departments; Flow of work; Analysis of the work to be done; Private offices; Impression

CHAPTER PAGE

9. ORGANIZATION AND WORK OF THE GENERAL SERVICE UNITS (*Continued*)

phone service; Employees' personal telephone calls; Duplicating services; Stationery and office-supply stock room; Layout of the stock room; Use of a stock-record card; The use of bin tags; Issuance of office supplies; The use of obsolete paper and forms; Inventory of office furniture and equipment.

10. OFFICE MANAGEMENT IN THE ORDER DEPARTMENT 184

Work of the order department; Order department routine; Order and invoicing procedure of a manufacturing company; Billing procedure at Grove Laboratories, Inc.; Order department procedure in a mail-order house; Analyzing the work of the order department.

11. OFFICE MANAGEMENT IN THE SALES DEPARTMENT 196

Reliance of the sales department upon records and reports; Organization of the sales department; Prospect records; Customer's record card; Statistical records of sales; Sales records used by Majestic Manufacturing Company; Territorial records; Salesmen's route cards; Salesmen's weekly expense accounts; Records of sales estimates and quotas; Sales quota record of Maremont Automotive Products, Inc.; Sales control—potent sales tool or an expensive luxury?

12. OFFICE MANAGEMENT IN THE ADVERTISING AND SALES PROMOTION DEPARTMENT 211

The place of the advertising function in business organizations; The advertising agency; Duties of the advertising and sales promotion departments; Departmental records; Record of prospects; Mailing lists; The auditing of mailing lists; Records of advertising rates; Record of advertising costs and results; Record of results obtained by an advertisement; Checking advertising results; Stock record of advertising literature; Sales promotion department of A. M. Byers Company.

13. OFFICE MANAGEMENT IN THE PURCHASING DEPARTMENT . . 228

The office manager's interest in purchasing; Scope of the purchasing function; Principles of procedure; The requisition; The stock record; The stock-record form; Specifications; Information regarding sources of supply; Contracts; The contract record; Make-and-hold agreements; Catalogues; The inquiry; Quotations; The purchase order; Summary of purchasing department procedure; Purchase and control of office equipment and supplies at American Brake Shoe Co.; Office management and purchasing; Purchasing procedure in a steel-manufacturing company.

14. OFFICE MANAGEMENT IN THE CREDIT AND COLLECTION DEPARTMENT 248

"Project Credit Plan" of United States Plywood Corporation; Importance of office mechanism; Two types of credit operations; Records the credit department needs; Request for credit information; Customer's credit file; Correspondence file; Other records; Record of customer's purchases and payments; Procedure in granting credit; Handling new business; Collection of accounts; Information the collection department desires; Collection card; Retail credit; Records used in retail credit management; Summary.

CHAPTER PAGE

15. Branch Office Management 263

Relationship of the office manager to the branch offices; Classification of branch offices; Types of branch office organization; Branch office methods of a steel company; Branch office methods of the Retail Credit Company; Accounting; Supplies and space; Organization supervision; Standardized procedure; Training; Morale.

16. The Office Manual 273

A manual used in 1856; Advantages of using manuals; Objections to manuals by employers; Objections to manuals by employees; Kinds of manuals; Office manuals at the Owens-Illinois Glass Company; How to prepare a manual; Office manual plan of Hardware Mutuals; Use of illustrations in manuals; Content of a typical general information manual; A mailing-department manual; A departmental manual; A manual for stenographers and secretaries; Instructions for individual employees; An accounting department manual.

17. The Preparation and Use of Forms 294

Advantages of giving proper attention to forms; Procedure for establishing form control; Factors to be considered in form design and construction; Principles of good form design; Other considerations in designing forms; Private printing plants versus purchased printing; Western Electric's form standards; How Servel controls its forms.

18. Reports Used by the Office Manager 316

Fundamentals of report preparation; Kinds of reports; Periodic departmental reports; Use of the questionnaire method; Periodic reports of other departments; Administrative and executive reports; An office manager's annual report; Special reports; Content of the special report; Practical problems of special report preparation; A special report on centralized employment; Eliminating unnecessary reports; Two typical examples of unnecessary reports; Conclusion.

CHAPTER PAGE

21. TRAINING AND PROMOTION OF OFFICE EMPLOYEES (*Continued*)
ing; Employee training, Metropolitan Life Insurance Company; Transfer and promotion; Executive and supervisory training; Executive training plans.

22. OTHER PERSONNEL ACTIVITIES 394
Free time allowances; Tardiness; Sickness; Vacations; Other causes of absence; Overtime; The five-day week; Lunch periods; Rest or relief periods; The company library; Employee information; Supervisor's personal contacts with employees; Memoranda or letters; Bulletin boards; House organs; Employee manual; Annual report; Public address system; Visual aids; Outside publicity; Insurance; Other personnel activities of a financial nature; Other employee services; Summary.

23. PAYMENT OF OFFICE EMPLOYEES 420
Office unions; Need for scientific salary administration; Fundamental principles; Incentive compensation versus straight salary; How to establish clerical standardization; Specific examples of incentive compensation methods; Bookkeeping-machine operation; Dictaphone operation; Invoice writing; Punching tabulating cards; Methods and experience of a large clerical organization; Results obtained; The advantages of bonus plans for dictating machine operators; Other forms of extra compensation; Conclusions regarding incentives.

24. SUPERVISION OF OFFICE EMPLOYEES 440
What supervision involves; Assignment of authority and responsibility; Knowledge of the work to be done; Appreciation of the relative importance of work; Getting along well with others; Ability to teach others; Representing the viewpoint of management.

SELECTED BIBLIOGRAPHY 459

INDEX 461

List of Illustrations

FIGURE		PAGE
1.	Chart of Office Management Functions	24
2.	Location Table	41
3.	Direct Lighting	51
4.	Semi-direct Lighting	51
5.	General Diffuse Lighting	51
6.	Semi-indirect Lighting	51
7.	Indirect Lighting	51
8.	Templates	70
9.	Typical Desk Layout Plans	73
10.	Actual Layout of a Small Area, Showing the Use of Templates	75
11.	Typical File Layout Plans	77
12.	Typewriter Time Analysis	86
13.	Analysis of Typewriter Utilization	87
14.	Typist Report	87
15.	Reproduction Guide	104, 105
16.	United Air Lines—Incoming Mail	160
17.	Report of Checks and Cash Received	162
18.	United Air Lines—Outgoing Mail	163
19.	United Air Lines—Mail Room	164
20.	Four Types of Postage Indicia	167
21.	One Form of Business Reply Envelope	167
22.	Another Form of Business Reply Envelope	167
23.	Customer's Record Card	199
24.	Sales Record—Majestic Manufacturing Company	201
25.	Salesman's Weekly Route Card	203
26.	Salesman's Expense Account	203
27.	Sales Analysis System—Maremont Automotive Products, Inc.	207
28.	Prospect Follow-Up Card	216
29.	Record of Advertising Costs and Results	219
30.	Stamp for Inquiries	220
31.	Lead Slip	221
32.	Salesmen's Report on Prospects	222
33.	Customer Call Report	223
34.	Typical Purchasing Procedure	230
35.	Requisition	233
36.	Stock Record	234
37.	Contract Record	238
38.	Inquiry	245

FIGURE		PAGE
39.	Credit Examination Sheet	251
40.	Collection Card	257
41.	Ledger Card	261
42.	Manual Change Notice	281
43.	Sample Manual Page	283
44.	Man and Machine Chart	284
45.	Check List for Form Design	296
46.	Sizes of Gothic Type	299
47.	Form Before Standardization	306
48.	Form After Standardization	307
49.	Results of Form Standardization	308
50.	Internal Printing Specification Record	310
51.	External Printing Specification Record	311
52.	A Typical Monthly Control Report	321
53.	Items on Typical Departmental Control Reports	322
54.	Forms, Records, and Reports Questionnaire	330
55.	Cost Control Progress Report	340
56.	Factors Affecting Office Volume	343
57.	Units of Measurement of Office Work	344
58.	Analysis of Departmental Expense	347
59.	Hour Analysis	349
60.	Job Ticket	352
61.	Personnel Requisition	363
62.	Job Description	364
63.	Job Description *(Cont.)*	365
64.	Tests and Their Significance in Office Work	369
65.	Wonderlic Instruction Sheet	371
66.	Minnesota Instruction Sheet	372
67.	Application For Employment	374
68.	Employment-History Record	376
69.	Record of Labor Turnover	378
70.	Monthly Turnover Report	379
71.	Sick Leave Table	397
72.	Overtime Practices	400
73.	Information Handbook Survey	408
74.	Amount of Life Insurance Under Uniform and Graduated Benefit Plans	410
75.	Amount of Weekly Disability Benefit Under Uniform and Graduated Benefit Plans	412
76.	Daily Hospital Benefits for Employees	414
77.	Job Description	426
78.	Job Analysis Sheet	428

1

The Profession of Office Management

Scope of the office manager's responsibility. Perhaps no other single position in a business organization carries with it such a variety of responsibilities as that of the office manager. In some cases, particularly in small companies, he is often responsible for the accounting function, including supervision of the general books, accounts receivable, credits and collections, accounts payable, and so forth. In addition, in such cases, the office manager also is responsible for correspondence, mailing and messenger service, filing, stenographic work, and other general office activities. In this capacity the office manager is an accounting officer whose title might perhaps better be, and frequently is, treasurer, controller, chief accountant, or secretary.

In other concerns, particularly in larger corporations, the office manager is largely a service executive having responsibility for all types of work that are general and common to all the individual working units of the general office, such as correspondence, office layout, mailing, filing, messenger service, telephone and telegraph, stationery stores control, maintenance, and so forth.

In some few cases, the organization of the office management function is so refined that the controller's, treasurer's, or secretary's department contains a general office division whose sections specialize in such activities as the above services in addition to office employment, methods and procedures simplification, furniture and equipment standardization, and other similar planning functions.

Growing importance of office management. In the past, the office manager's job has had to do with clerical routine. If, however, the office manager of today allows his ideas of the position to be limited by this fact, he is likely to become merely a chief clerk, or a glorified office boy. This attitude, moreover, will be an admission that he has neglected his opportunities for service, and both he and his company will be losers because of his failure to appreciate the opportunities of his position.

A study of the historical background of the profession of office management clearly shows that at first the position usually carried with it simply a meaningless title. Traditionally, each department head had been considered somewhat of a law unto himself, with the result that the majority of office managers in the 1920's found it most difficult and sometimes quite impossible to take over from the key men in the different departments the office duties which had accumulated and which they had been accustomed to look after.

This very desire for independence of action on the part of department heads, however, proved to be one of the chief reasons which made it obvious to an increasing degree that the centralization of office tasks would be a desirable step. Costly duplications and lack of coördination between the work of various departments were the two chief causes. In a word, the increasing size of the business unit and the constantly growing complexity of administrative problems have combined to make the office manager's job a necessary one in modern corporate organizations. The result has been that today the field of office management has logically and constructively reached out until it embraces a wide field, one which is potentially a powerful factor in the development and conduct of any business.

During the past twenty years, particularly, office management has come to be a recognized and accepted activity in the great majority of our business organizations, both large and small. The interest of top management in the functions of office management shows this very clearly. In his discussion of the controller, R. C. Cosgrove, vice-president and general manager of the Crosley Corporation, said: [1]

> I expect my Controller to organize and administer his department in a manner that assures all functions under his control being perfectly performed.
>
> I hold my Controller responsible for the efficient operation of all activities falling under the heading of office management. It is his job to see that mail is delivered and collected promptly throughout the office. It is his job to see that the central files and the stenographic pool are running smoothly. It is his job to provide adequate and efficient telephone and telegraph facilities. It is his job to develop efficient operation of duplicating activities, and it is his job to assist in the layout of all office space.

W. E. Tarr, General Office Manager of the Studebaker Corporation, said that if he were asked to describe the responsibilities of the office manager and an organization best suited to effect real improvements in morale and office operations, he would write the description somewhat as follows: [2]

1. The office manager to sit in on management conferences at which the company policy and programs are discussed and decided upon.
2. Top executive to inform other officials and top-ranking departmental executives of the status, duties, and responsibilities of the office management division.
3. The office manager to be compensated in accordance with his new rank in the organization, his responsibilities, and his effectiveness in improving operating results.

Office Manager's Responsibilities

1. Conduct clerical organization and work audits of all office operations at regular intervals for the purpose of recommending improved systems, methods, and equipment.
2. General supervision of all clerical and office operations of the company.
3. Direct supervision of all centralized office services such as telegraph, telephone, stenographic, and filing.
4. Direct supervision over all office personnel activities of the company.
5. Specify and approve the purchase of all office equipment.
6. Control office physical conditions, such as lighting, layout and service facilities.
7. By agreement with each operating executive, appoint an operating office supervisor for each department of the company. Appointment to be made from within each department wherever practicable.
8. Establish and keep up-to-date an analysis of job routines and a salary administration plan.
9. Originate and carry on research projects in all phases of office operations.

The Office Management Association of Chicago found, as the result of a survey, that in 55 per cent of the cases the person responsible for the operation of the office carries the title of office manager. In the other 45 per cent, the function is carried on by executives holding other titles such as vice-president, controller, assistant to the treasurer, and so on.[3]

The place of the office. The importance of office work and records is clearly illustrated in these excerpts from a paper of Hardy

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[2] Tarr, W. E., "Top Management Must Recognize the Office," *The Office*, January, 1943, p. 13.

[3] *American Business*, January, 1946, p. 52.

M. Harrell, Assistant Secretary in Charge of Personnel of the Gulf Life Insurance Company: [4]

When we speak of an office, usually we have in mind three organizations; namely, a working organization, a silent organization and an equipment organization. Let us think of these three organizations as one unit. Office organizations are like people, some large, some small; some old, some young; some neat, some untidy; some thrifty, some extravagant; some efficient, some slipshod. The reason for this likeness is that offices are made of, and operated by, people.

An organization as important as the office must have a manager to be efficient. That manager may have office management as his only duty; or he may be the manager of a small office and do everything, even the "maid's" work. The operation of the office, regardless of size, is dependent upon its manager. We want good office management because we want to effectuate good will and efficiency.

What is efficiency? It is certainly more than accuracy or correctness. I like to think of efficiency including not only accuracy and a volume of work but also the smoothness and ease of operation which contribute greatly to the building and maintaining of good will, pride, and happiness among the personnel and ownership pride in the care of equipment and

kept in an orderly manner or we will be unable to find the records we need and unable to determine the direction in which we are going. This organization is absolutely necessary in the operation of the business. Its efficiency and effectiveness is entirely dependent upon the working organization and, of course, the administrative officers.

The third organization is that of equipment. This organization is the workshop and the tools of the other two and includes space, lighting, heating and ventilation, floors and floor covering, noise reduction facilities, electrical facilities, desks, chairs, files, machinery, supplies and the proper arrangement within the organization.

Increasing use of records. The increasing use of records as an essential aid in managerial control has had a marked influence in making clear the necessity for an office manager. Action based on personal observation and first-hand knowledge is more and more giving way to decisions based on reports and records. Executives necessarily are finding themselves increasingly dependent upon records as a means of securing information and exercising control. This dependence upon records is strikingly illustrated by the fact that it is estimated there were some 7,000,000 clerical office workers in the United States in 1946, compared with 3,500,000 in 1930, 2,950,000 in 1920, and 1,630,000 in 1910.

A moment's consideration of the nature of many present-day business organizations will perhaps make this point more clear. Consider, for example, the striking contrast, from the standpoint of records and record keeping, between the needs of the independent retail druggist operating a single store with the aid of one or two clerks, and the requirements of such an organization as the United-Rexall Drug Company. In the first case the proprietor himself needs only the simplest sort of records and reports. He can, for example, tell in a moment the amount of business done during the day simply by looking at the cash register tape. An inspection of the stock of goods of a particular commodity that is on the shelves, together with his personal knowledge of the number of cases stored in the basement, enables him to tell at once whether an additional supply of that item should be ordered. No stock records are necessary. Money paid out for salaries and general running expenses as frequently as not is taken from the cash drawer by the proprietor himself. Thus the owner has constant personal knowledge of both income and expenses.

The president of the chain drug company needs exactly the same sort of information as the corner-store druggist. In practically every case, however, he or his principal assistants must secure the

Fourth, the office manager must devise methods requiring a minimum of effort. Great progress has been made along this line but when the methods of today and those of thirty years ago are compared, it is quickly apparent that the field is still tremendous.

Fifth, he must properly train his force of clerks. In all too many offices, scientific training methods are simply non-existent. Yet clerical work, to be properly done, requires training of a character equal to if not greater than most factory operations.

Sixth, the office manager must know what constitutes a day's work for a clerk, on any one of a hundred different jobs. Do not hastily assume that this is a simple thing to know. Frederick Winslow Taylor started on this quest to discover what was a day's work for a machinist, and it took him twenty years to get the answer; a long time, no doubt, but when he got it, it resulted in doubling the output of every machine shop in the world. Now I know of no operation in the office that should require twenty years' quest to discover what constitutes a day's work upon it, yet I know of very few office managers who will agree as to what a stenographer can do, to say nothing of what can be done in the hundreds of other office operations.

Seventh, he must secure a day's work from each clerk in his office. Any idea which he may have that the clerks are not productive workers, like all others who are paid for their services, and should not be so considered, should be abandoned by both the clerks and those who manage their activities.

There is no question that in the twenty years since Mr. Leffingwell spoke substantial progress has been made toward bringing office management closer to the status of a profession. In many offices where clerical work is a major activity, as it is in life insurance companies, for example, methods comparable to those used in factory production are widely used. Economies which office managers were forced to make during the early 1930's and during World War II eliminated much wasteful effort. Today the training of office employees is an extremely well organized and productive activity in many companies. The work of such organizations as the National Office Management Association, the Office Management Division of the American Management Association, the Life Office Management Association, and the Controllers Institute of America has had an important influence. Many of the practices which are cited in subsequent chapters of this book indicate clearly that office management can be more logically classed as a profession than was possible in 1925.

Yet much remains to be done. There are still all too many companies in which office work is regarded primarily as a necessary evil which merits the least possible amount of thought—and money.

Progress has been made, but the battle is far from won. A much wider application of the principles of scientific management to the organization and operation of offices must be made before office management can truly be called a profession. This situation, which calls for hard work and perseverance, is a challenge to teachers, to students, and to businessmen.

Mr. L. A. Griffin, formerly the General Office Manager of the Johns-Manville Corporation, discussing the progress still to be made toward professional status, enumerated six requirements in the establishment of a profession: [6]

A code of ethics or a statement of principles or conduct.
The free interchange of new truths among the members of the profession.
The possession of a body of organized knowledge.
Formal instruction leading to a distinctive degree from an institution of higher learning.
Certification of proficiency of individuals.
Recognition and acceptance by the public.

Office management has achieved some of these requirements. Its success in reaching full professional status will depend upon the qualifications of its practitioners and the success with which they render the services and produce the results which top management is coming to expect from office management.

Qualifications of an office manager. In addition to having a knowledge of the fundamentals, which are an essential part of true professional equipment in any field, the office manager must possess certain personal characteristics and qualifications over and above those which one may naturally expect every successful business executive to have. The more important of these are discussed briefly below.

Thorough knowledge of, and experience in, business. Without a good background of general business experience the office manager will find it most difficult, if not impossible, to win the confidence of his organization and to secure that coöperation from his subordinates and other department heads which is essential to success. In addition, it is desirable, although not essential, that he have had previous experience in the same line of business. The nature of his work brings him into constant contact with many people specializing in a variety of tasks, and, unless the office man-

[6] Griffin, L. A., "Is Office Management Approaching Professional Status?" NOMA *Forum*, National Office Management Association, December, 1943, p. 10.

ager has the proper background of experience and practice, he will find his path a most difficult one.

Tact and good judgment. Tact and good judgment form a part of the necessary equipment of every executive. However, in the case of the office manager, these traits are particularly necessary. The very fact that his department is an important coördinating factor in the organization frequently makes it necessary that he suggest changes in methods, a reorganization of activities, or the elimination of certain tasks. Such suggestions, upon first presentation to those concerned, may not be received any too cordially. To handle situations such as these, which are constantly arising, tact and good judgment are obviously very essential.

Sales ability. Mention of the need for tact and good judgment naturally suggests a third important characteristic which the office manager should possess, namely, the ability to sell himself, his ideas, and his position to his superiors and to his subordinates. He must, for example, be able to show the chief executives that his position does not merely mean just another item of overhead expense, but that the nature of the responsibilities involved fully justifies it. Getting subordinates to work and work willingly with one is in itself no small task. Here again the ability of the office manager to sell himself is apparent. The fact that responsibility for personnel relations is usually a part of the office manager's work is an added reason why he must be something of a salesman as well as an office executive.

Resourcefulness. The nature of the work for which the office manager is responsible frequently gives rise to unexpected situations which tax his resourcefulness and ingenuity to the utmost. If, for example, the sealing and stamping machine gets out of order —and this is sure to happen at about four-thirty in the afternoon rather than at some less inconvenient time—it is up to the office manager to see that the mail goes out that evening, even though he has to help fix the machine himself, or assist the regular force in doing the job by hand. Again, the office manager may find himself confronted with the problem of absenteeism and constant lateness on the part of certain subordinates. A practical and satisfactory solution must be worked out which will produce the desired results and at the same time not cause resentment and ill feeling. Anyone who has been faced with such a problem knows that tact is not the only necessary qualification. A considerable amount of resourcefulness and ingenuity is essential as well.

While it is obvious that resourcefulness of two entirely different kinds is needed in the cases cited above, it still remains true that the office manager who can quickly adapt himself to a situation and work out a satisfactory temporary solution or a permanent arrangement, as the case may be, is the one who will be held in high regard both by his superiors and by his subordinates.

Methodicalness. The establishment of office methods that will function smoothly and properly is an essential part of the office manager's task. Success in this work means, in turn, ability to analyze a situation carefully, to obtain all the facts, and to work out a plan which will systematize methods of handling routine work. In listing "methodicalness" as a basic qualification, therefore, the word is not used in a sense of fussiness and pettiness, but rather to indicate the fact that the office manager, because of his responsibility for office methods, must be able to bring system and order to their supervision.

Knowledge of the work—more important in the lower supervisory levels; less important higher up.

Good health—older supervisors emphasize its importance; younger ones take it for granted.

Although this list was not intended primarily for office managers, it nevertheless serves the useful purpose of calling attention to certain desirable traits in the leader.

Recently, a group of office managers rated the attributes of a good office manager as follows: [5]

1. Ability to get along with other people
2. Knowledge of office procedures.
3. Judgment.
4. Intelligence and mental qualities.
5. Personality.

The ranking of a quality such as the ability to get along with other people above the factor of technical knowledge is an interesting reflection of the awareness in the field of management of the importance of human relations in business today. The first and second factors listed above received a combined rating of almost two thirds of the total, indicating that, in the opinion of this group, the office manager who has a knowledge of his job and the ability to apply successfully the human factor as embodied in his employees can expect a fair measure of success.

[5] Anon., "Attributes of a Good Office Manager." NOMA *Forum*, National Office Management Association, April, 1945, p. 3.

2

Organization and the Work of the Office Manager

The five basic divisions of business. Fundamentally the functions of any business organization may be grouped under five headings—*production, finance, accounting, distribution, and administration.* The specific relationships which each of these main divisions —and in turn, their subdivisions—bear to each other may be referred to as organization. Although the general office is usually a part of the division of administration, all of the office work in certain kinds of business, and some of the office work in practically all companies, is more closely related to production. This relationship is worth thinking about for a moment in considering the organization and work of the office.

The office as a productive activity. A moment's consideration will show that every business, whether it is engaged in manufacturing automobiles or in underwriting insurance risks, produces a product or service of some kind. The units of the organization which have to do with this production constitute the production departments of that company. This is true, regardless of whether the company sells a material object or an intangible service. In the home office of an insurance company, for example, hundreds of clerks are employed to perform a wide variety of operations on the insurance applications and policies. In a mail-order house, similarly, many persons are engaged in preparing the customer's order for shipment, the operations being divided into a series of specialized tasks, each of which is necessary to the successful completion of the finished job. As will be made more clear in subsequent chapters, the principles followed in organizing such work are, in many cases, the same ones which have been applied successfully for years in manufacturing plants. The mere fact that the operations are performed in an office and are considered clerical work does not in any way make them non-productive. Thus in a

very real and practical sense the office is an important productive activity in every company.

Organization. In the previous section, organization was defined as the relationship which the five basic divisions of business bear to one another. This definition, however, is somewhat too general. More specifically, organization may be defined as the division of a complex objective into minor activities, each of which is within the scope of individual effort. This view will serve perhaps to crystallize our conception of organization. Thought of in this way, it is clear that the work of organization consists of subdividing the whole task into relatively small parts, so that each may be done successfully by a single individual. For example, the primary responsibility of the president of an automobile company is to produce and sell automobiles at a profit. This is the complex objective. Obviously, however, the president cannot do everything himself. He, therefore, breaks down this objective into major component parts or divisions and places in charge of each a person who, by past training and experience, he feels is competent successfully to handle that part of the work. Thus he may appoint a vice-president in charge of sales, a vice-president and treasurer, and other major executives.

Organization, of course, does not stop here. These men, in turn, cannot do all the work personally. They, therefore, subdivide their responsibilities, placing in charge of each main subdivision a person who, in their opinion, is competent to do the work. Thus the vice-president in charge of finance, for example, may appoint a controller, an office manager, a credit and collection manager, a cost accountant, and so on.

These department heads, in turn, analyze their responsibilities and again subdivide them. The office manager may decide that centralization of the filing function is desirable. Therefore he organizes such a department and appoints someone to take charge of it. Similarly, a centralized stenographic department and a centralized mailing and messenger department may be established. The heads of these units, in turn, have their organization problems.

It may truthfully be said that as soon as one person is employed by another, there is organization. While it is obvious, of course, that the problem is more complex in a large company than in a small one, the fact still remains that the problem is present and must be solved. Success in solving it distinguishes the organizer from the mere employee.

Management. Management, as distinguished from organization, has to do with the work of bringing about the proper coördination between the various factors with which it has to deal, among which are men, materials, money, methods, and machines. These five factors are often referred to as "the five M's" of management, and even a brief analysis of any managerial problem will show that one or more of them is always involved. Horace Greeley is said to have defined a businessman as "one who knows how to set other people's heads and hands at work, both to his profit and their own." In making this statement he very obviously had the business manager in mind. Organization then may be spoken of as the building or developing element, the structural element, if you will, while management is the directing, controlling, and coördinating element.

Scientific management. The management which applies science to its work, which demands facts instead of guesswork, which establishes standards and methods which are scientifically determined, and, through the aid of records, sees that they are carried out, is spoken of as Scientific Management.

W. H. Leffingwell ably summed up and explained scientific management in his statement of "How to Manage" as follows:

1. Define your purpose.
   You must know what is to be done before you can know how to do it. This is your master work.
2. Analyze your problem.
   Your master task will then break up into many detail tasks. Consider them all—neglect none.
3. Seek the facts.
   Study every condition governing each task. Find the undesirable elements, and the desirable elements to be retained. Then standardize right conditions.
4. Devise the one best method.
   Aim to conserve energy, time, space, and material.
   Determine the relation of details to the master task.
5. Find the person best fitted.
   For each task certain personal qualities are essential.
   In each person certain qualities predominate. Find the person best fitted for the task at hand.
6. Teach the person best fitted the one best method.
   Not by driving, but by thorough, patient teaching are understanding and skill developed.
7. Plan carefully.
   Right planning of the arrangement and sequence of work will enable

you to accomplish tasks in logical order—accurately, quickly, and economically.

8. Win coöperation.
   Coöperation means working together. It cannot be demanded. It must be won. Accept your share of the responsibilities. Respect the rights and aspirations of others.

Scientific management, although originally developed in the machine shop, is equally applicable to the office, because it is simply using common sense in applying knowledge. When scientific management is considered not as a set of arbitrary rules, but as a means of getting the best out of the business, it is appraised more nearly at its true worth.

Scientific management lessens the cost of attaining results without injury to health or other detriment to the workers. It improves working conditions, increases the earnings of employees, and gives more and better articles and service to the public at much lower prices than would otherwise be possible.

System. Observation of the way in which many organizations are operated shows clearly that even among experienced businessmen there exists considerable confusion between management and system. It is of the utmost importance that a clear distinction between these two be drawn. System may be defined as the application of planned methods of procedure to business operations. Through system, every-day work becomes routine. Unfortunately, in the past there has been a tendency to assume that a good system involves much red tape, many forms to be filled out, and considerable delay. As a matter of fact, the real object of system, and, therefore, the characteristics of a proper system, are exactly the opposite. It is the purpose of system to smooth the way for the performance of routine tasks, to speed up work, and to increase, rather than to diminish, efficiency. System is a valuable and distinct mechanism and an aid, both to organization and to management, but is in no way synonymous with either.

Types of business organizations. Since the organization and work of the office and its relative importance in a given business depend to a considerable extent on the organizational structure of the company itself, it is important that the reader be familiar with the types of organization in common use today.[1]

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[1] Cornell, W. B., *Organization and Management in Industry and Business*, The Ronald Press Company, New York, 1940.

1. *Line type of organization.* The oldest and simplest type of organization is the line type. In a small organization the owner or manager gives his orders directly to the workers and the workers are directly responsible to him. In a larger organization, as the duties and responsibilities would be too great for any one man, he turns certain of his duties over to executives placed in charge of particular phases of the business. Lines of authority are vertical. All on the same level of authority are independent of all others on that level. Each is supreme in his own field and is responsible only to the man directly above him.

The line type of organization is most excellent in so far as the giving of orders and the defining of duties and responsibilities are concerned. Each man knows definitely his place in the organization. Discipline is easily maintained and control is definite. If a policy is to be changed or an important order is to go out the instructions can be passed rapidly down the line and the change put into effect immediately. The organization plan is simple and there is a minimum of red tape.

To be efficient the line type of organization necessitates the highest grade of executives and workers. Therein lies the main weakness of the line type. No other type demands such all-round knowledge and ability. The foreman of a shop has complete charge of that shop and is held directly responsible. He must understand how the work should be done, plan and lay out the work for the whole shop, see that the equipment for doing the work is on hand and in good condition, determine the proper methods, hire the workers, instruct them, see that they work steadily, accurately, and rapidly, adjust their wages, and take care of an infinite number of other details. He in his turn demands of those under him more than can be expected of them. He becomes a driver instead of a leader. Line organization is an autocratic control requiring absolute obedience and complete knowledge, with the result that, while much may be accomplished, the work is apt to be crude and the workmen "Jack of all trades

Under functional organization the worker comes in contact and takes orders from several functional foremen or supervisors. He takes orders from and is responsible to each supervisor only in regard to the performance of the particular function or functions over which the supervisor has control.

Competent supervisors are more readily found in the functional type of organization than in the line type. The field of the supervisor being restricted to the performance of his particular functions, he can be more readily trained for his work.

It is doubtful if a pure example of functional organization exists in business today. However, the principle of functionalization of activities and allocation of duties and responsibilities on a functional basis are widely recognized and applied.

3. *Line and staff type of organization.* The line and staff type of organization is a combination of the best features of both the line and the functional types. Authority flows from the top to the bottom as in the line type, thereby definitely fixing duties and responsibilities and insuring proper discipline. In addition to the regular line supervisors, however, there is a staff of experts or specialists. Each expert is at the head of a staff division which has charge of a single leading function or certain similar or complementary functions. The experts and their assistants work out the problems relative to the performance of the particular functions over which they have charge, no matter where those functions are found throughout the business.

Unlike under the functional type of organization, experts do not give their orders direct to the workers concerned. Their recommendations and directions are carried out through the line supervisors in charge of the workers. Thus, the line supervisor directly controls the workers under him and maintains the proper discipline. He does not, however, have to bear the heavy load of duties and responsibilities as under the line type. He is responsible for seeing that the recommendations and instructions of the staff experts are carried out, for the control of his men and for all other duties assigned to him, but he is relieved of solving the many problems covered by the staff or service divisions.

4. *Committee idea in organization.* One of the most effective means of making a business structure pulse with life is to get the members working together as a team. Men on the same authoritative level often unconsciously are jealous of each other or distrust each other, feeling that unfair advantage or undue credit is being taken. Place these same men on a committee, give them a common problem to work on, and on getting to know one another better their suspicions vanish. Harmony is an important side issue of the work of committees.

Success in any enterprise depends upon unity of action. The larger the organization, the greater the need for some coordinating force to bind the various units into a working whole. Properly selected committees placed at strategic points in the organization can be made that force. For example, one of the greatest problems in industry is how to balance sales and production. Close cooperation between the sales division and

Thus, for example, the function of handling incoming and outgoing mail and providing messenger service is put under the jurisdiction of one person, who is responsible for seeing that this particular type of service is effectively rendered to all other departments of the company.

In practice, fully departmentalized and centralized types of office organization are found only infrequently. Take the example of mailing and messenger service just cited. One will find many cases in which a mailing and messenger department exists, but almost invariably one or more messenger boys will be found who are definitely and permanently assigned to the offices of one of the chief executives. Similarly, many examples of so-called fully centralized filing and stenographic departments exist which, upon investigation, prove to be entirely centralized in theory only. Rarely, if ever, does one find the chief executives and department heads utilizing exclusively the services of these departments. The president, the treasurer, the sales manager, and others find it desirable to have their own private secretaries and to file certain letters and papers in cabinets in their own offices. Thus, even though the centralized or departmental type of organization may, on the surface, appear to exist, exceptions arise to a degree which make it impossible to say that a pure departmental or centralized form of organization is to be found.

Advantages and disadvantages of centralization. Inasmuch as centralization is a problem which is fundamental to the work of every office manager, it will be worthwhile to state briefly the advantages and disadvantages of this form of office organization. These may be summarized as follows:

ADVANTAGES

1. It makes use of specialized supervision, which results in better quality and quantity of work.
2. It develops specialized personnel. Training of the employees is facilitated and, through repetition, expertness in performance can be achieved.
3. It reduces waste time. Production peaks and valleys can be eliminated by proper planning and scheduling.
4. Rush jobs can be finished quicker by utilizing the entire unit.
5. Idle time of machines and equipment is reduced. The result is a lower inventory of these items and a reduction in space requirements.
6. It is easier to cope with absences due to vacations or illness.
7. Standards of performance can be established more readily.
8. Equitable wage administration becomes more simplified.

greater than his own stenographer can handle conveniently. Thus a minimum of the stenographer's time is wasted through lack of work, and inconveniences to the executive on account of absences due to sickness, vacations, and other causes are reduced to the minimum. The net result of the plan is that both the executives and the stenographers secure the benefits of a private secretarial arrangement with all of its obvious advantages, but with most, if not all, of the usual disadvantages eliminated.

The place of the office manager in the organization. The place of the office manager in the organization, of course, is a matter which is determined very largely by the way in which the function of office management is defined in a given company.

In an attempt to appraise the present-day job of the office manager, the Policyholders Service Bureau of the Metropolitan Life Insurance Company, with the coöperation of the National Office Management Association, surveyed some fifty representative companies, selected to provide as broad a range of experience as possible. The results of this study are summarized in the sections that follow: [2]

Office Management vs. the Office Manager

One of the significant points brought out by this survey is the distinction that must be made between the function of office management and the job of the office manager. While the office management function is present in every business organization, there is considerable variation in the manner in which this function is distributed and assigned. Every company does not have a specifically designated office manager. As a matter of fact, most executives, irrespective of their title or responsibility, perform some office management function and are to that extent office managers.

Organizing for Office Management

From an organization standpoint, the principal distinction lies in the extent to which office management has been functionalized. This survey indicated that the arrangements generally followed on this point can be grouped as follows:

1. *The company in which office management is fully functionalized.* Here the responsibility for all office management functions is concentrated in the hands of a single executive, who is the office manager in fact as well as in title. Where this arrangement is followed the office executive, as a rule, reports direct to the president or general manager and is responsible for all office activities, irrespective of their nature or

[2] *Functions of the Office Manager,* Policyholders Service Bureau, Metropolitan Life Insurance Company, New York, 1941.

attempt to include an office management specialist in their organization, either on the service or staff basis, as covered by Plans 2 or 4 or in combination with other activities.

Relationship to the Comptroller

One significant point from the standpoint of organization developed by this survey is the growing importance of the comptroller in the office management picture. In at least 20 of the companies whose practices were reviewed, responsibility for the administration of office activities was either assigned directly to the comptroller or chief accounting executive, or was his indirectly through a subordinate office manager. Apparently, this has been a natural development of the comptroller's job. Much of the record keeping with which the bulk of office activities are concerned is required and used for control purposes. As the executive responsible for this control function, the comptroller naturally is directly concerned in the manner and form of preparation of the control data.

General Scope of Office Management

Because of the variations in the organization and interpretation of the position, as already described, it is not possible to set down a standard list of activities as constituting the functions of the average office manager. It is possible, however, within certain reasonable limits to outline the general scope of activities normally included within the field of office management. Figure 1 gives a composite list of functions as developed by one company.

For the purposes of this report, the functions of office management have been grouped into six general classifications.

Functions related to:

1. Office personnel.
2. Office methods.
3. Office equipment.
4. Physical factors in the office.
5. Control of office costs.
6. Office policies.

Each of these divisions includes a number of detailed activities in the assignment and handling of which probably no two companies are identical. Because of this variation of practice, each of these groups of activities is separately discussed in a subsequent section of this report.

Allocation of Specific Functions

The allocation of office management functions within the organization cannot be discussed in too general terms, but must be considered in terms of the various detailed activities involved. Perhaps the most important question for decision in this connection is the degree of centralization to be employed. In other words, what is to be the relationship and the respective responsibilities of the office executive and the various depart-

mental operating executives on the many matters affecting clerical operations in those departments? Apparently there is no agreement as to the best policy on this point. It depends too much on the activity involved and the circumstances in each specific case. Also there are differences in the fundamental concept of the office management function that would directly affect this decision.

One point on which there is general agreement in this connection, however, is the need for a clear-cut and definitely established division of authority and responsibility irrespective of the point at which this division is made. Neither arrangement will prove very effective if there is not a thorough understanding by the executives concerned of their respective responsibilities.

Functions related to office personnel. As in any phase of business today, matters affecting office personnel have special significance. In the final analysis, a large proportion of all transactions and operations in the office involve the human factor and consequently call for personnel management. Under this category comes the recruiting and selection of office workers. They must be assigned to tasks for which they are best fitted and given adequate training in their work. Proper motivation must be provided in the form of equitable compensation and promotion, with the incentive factor furnished by recognition of specially meritorious work. The attitudes of the employee toward the company must be developed and guided so as to forestall misunderstandings and grievances and to build up a spirit of loyalty and cooperation. Besides all this, there must be the day-by-day direction and supervision of the work of each individual employee and the maintenance of discipline and personal efficiency.

Functions related to office methods. Office methods constitute a second major group of office management functions. Under this heading is included the planning of office operations and the devising and prescribing of office methods, procedures, and routines involved in the conduct of the office activities. In this category probably should also be included matters related to the various office records and the forms and supplies required for the preparation of such records. Questions of standardization and simplification of forms and procedures will be involved, and problems of the flow of work and order of handling are included. From the standpoint of organization, the question again is the extent to which these functions fall within the province of the office manager.

A large majority of the companies surveyed have concentrated responsibility for all office methods, forms, records, and procedures in the hands of the office executive. Of the 31 companies that reported following this plan, 20 do so without qualification. In several other cases the only restriction is to make the decision of the office executive subject to the review or approval of a senior executive, such as a vice-president or comptroller.

Methods work in the office has come to be quite generally regarded as a job for specialists. Standardization or methods units have been established to carry on these activities. Usually these groups operate in a staff capacity, under the direction of the office manager.

also responsible for office management matters, as is often the case, centralized control of office costs would naturally be included. If there is no such combination of functions, the office manager has varying degrees of responsibility for cost control, depending largely on the extent of his authority on other matters. In about half of the companies surveyed the office executive had definite responsibilities in connection with the control of office costs. In some instances this involved the current development of detailed unit costs for each office activity; in others, special cost analyses are made only of certain activities and not on a continuing basis.

Functions related to policy determination. Questions of policy are constantly arising in the administration of an office. Some are fundamental and broad in their implications, affecting all phases of the company's operations; others are of little or no significance beyond one particular department or division. It is difficult to define just what constitutes a question of policy, and it is equally difficult to differentiate between policies related to office management and others. For these reasons there is no clear-cut definition of the office manager's responsibilities as regards policy matters. So far as it is possible to generalize, it may be said that policy matters of a routine nature and those limited strictly to office problems are usually left to the jurisdiction of the office manager. Generally, however, the determination of company policies is the function of the senior executives. Often it is the president's responsibility, and in some matters the board of directors makes the decision.

It is quite evident that a rather definite distinction is made between the office executive's responsibility for formulating policies and that for interpreting and administering them. The latter seems very definitely to be a part of the office manager's job. As the point of contact between the executive management and the office organization, he is looked to to see that the company viewpoint is properly presented and understood, and that the policies are introduced and administered in a way to conserve and promote employee good will and cooperation.

Work simplification. One of the duties of the office manager which has become increasingly important in recent years, particularly in larger and more progressive companies, is the responsibility for the establishment of efficient and economical procedures in all departments of the organization, including the office division itself. Work of this type is often referred to as methods study, procedure study, or work simplification.

Mr. George H. Sutton, of E. I. du Pont de Nemours & Co., in a discussion of this subject, said: [3]

Necessity for work simplification. It is through work simplification that we must depend largely in our efforts to establish definite work

[3] Sutton, G. H., "Work Simplification," NOMA *Forum*, National Office Management Association, June, 1943, p. 10.

attention given to them. They have simply outlived their usefulness and nobody has taken the initiative in eliminating them. As a result, they go on month after month with a needless waste of printing cost and the even more important loss of clerical time in their preparation.

Machine studies. One of the most important things we need to do in connection with our mechanical equipment today is to make sure that we are getting the maximum use of our machines. That is, are we assigning work to our operators which should be done by other clerks before it comes to the machine. In our central billing office it was found that by having clerks go through the meter books and prepare certain accounts of an irregular nature in advance the greater production by the operators more than offset the preliminary clerical work. On any machine operation where the operator is frequently stopping even for a few moments there is a possibility of rearrangement of the work to advantage.

Perhaps you are turning over in your mind the question: "What do we need to do in our office to establish a more effective program of work simplification?" With the many different types of businesses, plus the fact that some are "home" offices, some divisional or regional and others district or local offices, the answer will not be the same for all because each office has its own particular problems to work out. You might find it desirable to call in an outside consultant on office planning to make a complete survey and recommendations. Many companies have found this to be a very effective plan because they get the benefit of an outsider's viewpoint, with a broad experience gained from many different types of business. Another plan is to have this work carried on by a Methods or Standards Division, operating as an independent unit in your own organization. I think this set-up is much more desirable than calling in an outside expert because your own Methods Division, by giving its full time to only one business, could readily spot the weakness in some new system or procedure under consideration.

A third plan is for the office manager and his supervisory staff to do the job themselves. Frankly, I feel that this is where the job belongs, although I will readily concede that office managers have not exactly "set the woods on fire" in their efforts along this line in the past. With all of our other responsibilities steadily increasing, there is certainly a temptation to defer making the proper analysis of existing methods and procedures, particularly if they are operating smoothly. But after all, do office managers and their supervisory staffs really have any duties more important than planning the work and setting up procedures and routines so that it will be done in the most efficient manner possible? Why shouldn't they be the ones to first see the possibilities in work simplification on the various assignments under their supervision?

The Director of the Office Methods Division of the Westinghouse Electric Corp. of Pittsburgh, Pa., describes his company's plan as follows: [4]

[4] Neaidengard, R. C., "Organizing and Operating the Methods Department," *Annual Proceedings,* National Office Management Association, 1945, p. 99.

arise into further subdivisions, such as storeroom inventories, in-process inventories, warehouse inventories, etc.

2. *Equipment analysis*—To establish subdivisions headed by specialists in bookkeeping, payroll, tabulating, reproducing, transcribing, and any other types of equipment, as needs arise. Our present plan provides for further segregation of these subdivisions as new developments occur, which will substantiate detailed studies of various types of equipment within any major equipment group. For example, it may be necessary under reproducing equipment to have specialists on duplicating, others on photographing, and still others on electronic reproduction. Again, the job chart is flexible to subdivide as needs arise.

3. *Forms engineering*—To establish subdivisions, such as standardization of forms construction, application of forms, standardization of forms in use for same activities, paper conservation, etc.

4. *Records analysis*—To subdivide to microfilming, records preservation, local filing of semi-active records and permanent filing in an archives building, which we plan to erect as soon as restrictions are off; and as other operations are determined, to further subdivide these operations.

5. *Office layout analysis*—To subdivide this main classification into office arrangement, furniture and fixture application, lighting and ventilation, and any other subdivisions that may be further desirable as time goes by.

6. *Clerical incentive analysis*—To create subdivisions of different classes of clerical operations. One subdivision will be central stenographic operations; another will be accounting machine operations, and another will be filing and sorting operations. Further subdivisions will be made as programs of clerical incentives are accomplished and accepted. In the analysis of clerical incentives, we must watch closely the progress of employee gain through incentive in the various types of clerical jobs, as this is our guide and the indicator of our progress.

This is the overall job chart that we have developed to follow in expanding our office methods division. As you see, it provides flexibility for expanding or contracting as the needs arise from changing conditions. It also combines several types of segregations of operations which we feel gives us complete coverage of all office methods and procedures; and it provides for supervision and education of methods people through various steps in the operations, so that a minimum of key personnel can operate down to the most minute detail.

The plan for the operation of the methods division consists of having each major classification headed by an assistant director, who will coordinate the activities of the various major classes. As the analyst or specialist in any particular major class finds conditions which call for counsel or advice by a specialist from some other major class, these people will be brought together to jointly solve the problem.

3

Selecting an Office Site

Importance of proper location. The question of where an office shall be located, both as to the community and the building itself, is an important one. When one considers that office space in buildings in larger cities costs from three to six dollars per square foot per year, while other quarters—not necessarily far away—may be secured for from one to two dollars, it becomes apparent that careful consideration of the relative advantages and disadvantages of possible sites is important.

Rental cost, however, is not the only factor to be considered. Nearness to allied or associated lines of business, accessibility for customers and employees, provision for future expansion, the reputation of the locality and of the building itself, and nearness to sources of supply and transportation facilities, as well as many other matters of equal importance, must be considered. Moreover, assuming that the office will be located in a building already constructed, the various possible buildings must be considered in connection with the adaptability of the space offered to the layout of the departments and the flow of work. Although in actual practice a compromise is frequently necessary, it is far better to follow the principle of finding space which will be suitable to the existing or proposed departmental layout rather than to attempt to fit the departments, by expansion here and contraction there, into a space which has been selected merely because it is cheap in price or because it commands an excellent view from what will be the chief executive's private office.

Basic considerations. In considering the question of office location, thought must first be given to several fundamentals of policy and practice. First of all, in the case of a large organization, there is the question of the building itself. Is it better to build a new building and occupy all or an important part of the space, or rent a building already built? Again, do the space demands necessitate renting all the space now, or is it better to rent only a part of the

space available at the present time and to provide in some other way for future expansion? In addition, in the case of a manufacturing company, there is the question as to the best location for the office. Shall the office be located in the same community as the plant? If not, where? If the office is to be at the same site as the plant, shall it be placed in the same building occupied by the manufacturing departments, or shall a separate administration building be constructed? These questions merit careful consideration.

Erecting a new building. While it is clear that only relatively large companies are in a position, from the standpoint both of finances and of space needs, to consider the erection and occupation of a new building, many advantages accrue to the company that decides upon this course.

If the company decides to build, it is possible to plan completely the interior layout and construction to suit one's own individual needs, and to provide for future expansion for many years to come in any one of a variety of ways. The home office building of the New England Mutual Life Insurance Company in Boston, the *Daily News* building in New York, the General Motors building in Detroit, the McGraw-Hill Publishing Company buildings in New York and Chicago, the Prudential Insurance Company of America building in Newark, the Palmolive and Wrigley buildings, and the *Tribune* Tower in Chicago—all are but a few illustrations of cases in which it has been possible for individual companies to secure these advantages. Banks also are institutions that often occupy entire buildings. The various Federal Reserve Bank buildings throughout the country, as well as the buildings which bear the names of individual commercial and savings banks, are all cases in point. Generally speaking, banks occupy an entire building more frequently than do business organizations.

One practical method, which is often used in cases where a company constructs its own building but is not in a position to occupy the entire floor space at once, is to arrange some of the floors so that they may be rented temporarily to other occupants. If deemed desirable, the ground floor may be fitted up for store use. By being careful in arranging leases and by exercising a little forethought in construction details, it has been possible, in many cases, to provide adequately for future expansion and at the same time secure a welcome income from the space thus reserved until such time as it is needed.

In addition to securing the construction and layout which the requirements of the business demand, the erection of a new building which bears the name of the company obviously has distinct advertising value. This is true, of course, even though some or a considerable share of the total space is leased to other organizations. In fact, in some cases the company whose name the building bears may occupy only a minority of the total rentable floor space. The RCA building, one of the buildings comprising Rockefeller Center in New York, and the McGraw-Hill building in Chicago are cases in point. Generally speaking, building-management firms, whose business it is to rent and manage large office buildings, are glad to make such arrangements, especially with nationally known companies. In this way not only is the rental of an important amount of space for a considerable number of years assured, but the fact that a well-known organization is going to be located in the building is a distinct asset in facilitating rentals to other equally desirable tenants.

Renting an old building for exclusive occupancy. Where the construction of a new building does not seem practical, the suggestion is sometimes made by company executives, or others, that an old building be acquired and completely renovated to meet the needs of the organization. The problem of acquiring and altering an existing building, however, usually presents difficult practical problems. For one thing, there is the matter of obsolescence. Office buildings which are thirty or more years old are generally regarded as obsolete. If, then, a company is considering the advisability of purchasing a building ten years old, it is at once apparent that one-third of the possible life and usefulness of the building has already passed. Recent advances in building-construction methods and the quick public acceptance of such things as air conditioning, soundproofing, and high-speed automatic elevators have tended to accelerate materially the rapidity with which buildings become obsolete. It is well to remember that the office is the "home" of the business, and that the same factors that cause people to demand modern houses are present to the same extent in the case of business buildings.

In addition to the matter of obsolescence of the building itself, obsolescence of the neighborhood in which the building is located must also be considered. Even the most casual observation of the changes which have taken place in practically every city of the country will show that locations that were considered excellent

twenty years ago are today quite impossible for business purposes. The acquisition of an old building, therefore, with the thought that the organization will in some way be able to put up with the inconveniences of construction and location, which are apparent even before the building is occupied, is almost always poor economy in the end.

Apart from the question of obsolescence, the problem of making necessary changes to adapt the building to the uses of the new owner is frequently a costly and difficult undertaking. The location of columns, the placing or removal of partitions, the condition of the wiring system, the location of wash rooms, stairways, elevators, and so on, the size of bays, and a host of other factors are likely to arise and to obstruct, if not to make altogether impossible, the design of a layout in harmony with best modern knowledge and practice.

In a word, the purchase of an old building, or the rental of one for a long period of years, is a step to be avoided, except when unusual circumstances prevail. Even in a new building, changes which should or must be made come quickly enough.

Occupancy of rented quarters. The third alternative open to the company seeking a new location is one that is followed in a large majority of cases, namely, the rental of space, either in a new building or in an old one. The major advantages of such a procedure are, of course, the obvious fact that no considerable amount of capital need be tied up in the building itself; the freedom of change in the future, which renting always gives; and the freedom from care and worry, which is the price of ownership in any case.

On the other hand, renting has its disadvantages. It is not always possible—in fact it is usually impossible—to secure exactly the sort of layout that will best fit existing or contemplated departmental arrangements. It is usually necessary, therefore, to fit the organization, to a certain extent at least, to the layout. In addition, the tenant must necessarily rely to a considerable extent upon the promises of the owner or agent in regard to building maintenance and service facilities that will be provided. Those matters for which the tenant is usually responsible, as set forth in the usual office lease, and those for which the owner is responsible, are discussed in a subsequent section in this chapter.

Selection of the location in the community. Assuming that a company is going to occupy rented quarters, as is usually the case,

the location in the community must be selected. A number of factors are of particular importance, among them being the reputation of various locations or neighborhoods in the city, probable future developments in the section under consideration, nearness to service facilities, and convenience of location for employees.

Neighborhood reputations. Neighborhoods, like individuals, have reputations. It is often of the utmost importance that the office be located in the "right" part of town. A very brief and simple analysis of the various business districts in any city will show clearly that each is thought of in connection with a particular line of business. For example, in every large city there is the retail or shopping district, the wholesale district, the financial district, the residential district, and so on. These, in turn, are often subdivided into zones, which are associated with specific classes of trade. For example, Fifth Avenue and Madison Avenue above Forty-second Street, in New York City, are generally regarded as the exclusive shopping districts. The location of the Saks Fifth Avenue Store at the corner of Fifth Avenue and Fiftieth Street marked the beginning of a distinct tendency for the higher-class stores and specialty shops to locate on Fifth Avenue between Forty-second and Fifty-ninth Streets. In 1946 both Best & Co., located at Fifth Avenue and Thirty-fifth Street, and Lord & Taylor, located at Fifth Avenue and Thirty-eighth Street, announced plans to move to Fifth Avenue at Fifty-first and Fifty-second Streets. One of the main reasons undoubtedly was the importance of a location within this exclusive shopping district.

The business sections of New York City also have their specialized reputations. Maiden Lane, a narrow street in downtown New York, has for years been the center of the jewelry trade. John Street for a long time has enjoyed the reputation of being the center of the insurance brokerage business. Wall Street, of course, one immediately associates with financial institutions of all kinds.

specialty shops, as well as many of the newer office buildings. In San Francisco, Market Street is the principal business thoroughfare. The leading financial houses are located on Montgomery Street, while the wholesale district is concentrated on lower Mission Street. Numberless additional illustrations might be given to show that a very distinct although invisible line divides the business life of any city into a number of component parts.

Forecasting future neighborhood changes. The present reputation of a neighborhood, however, is not the only matter to be considered. In fact, it is just as important that the probable changes in the neighborhood during the coming years be taken into account and estimated as accurately as possible, as it is that the present reputation be given consideration.

A specific illustration will indicate very clearly the disastrous results which are bound to follow when future changes are not given proper weight. In this case the home office of a nationally known financial institution was located in what was formerly the residential district of a midwestern city. The ground was cheap, there was plenty of light and air, and there was no reason to suppose that for an indefinite period of time the institution would not be able to meet all of its requirements in an effective manner in the location chosen. After the lapse of a very few years, however, the situation changed so materially that the entire character of the neighborhood deteriorated, and it is now completely inundated with light manufacturing establishments, as well as settlements of large groups of industrial workers. It is a foregone conclusion that this institution, which is rapidly expanding, will be obliged to move in a very short period of time to another location where it will be in surroundings adapted to the character of its business and likely to hold the type of employee which the institution seeks to attract.

Nearness to service facilities. Offices depend to a large extent upon a variety of service facilities made available to them by various outside agencies. For example, little business could be transacted without the use of the mails. Where the volume of correspondence is considerable, as in an insurance company or a mail-order house, nearness to the post office or its substations is of considerable practical importance. Similarly, proximity to express offices, to railway terminals, to district offices of the telegraph company, to office supply houses, and to other outside service agencies, is desirable. While this group of factors may perhaps,

in general, be regarded as relatively unimportant, they must always be taken into consideration in choosing an office site.

Convenience to employees. In office location the convenience to employees in going to and from work is not always given the consideration which it deserves. Every office manager will realize, after a moment's consideration, that employees select positions and stay longest, other things being equal, in those offices which are most conveniently situated with reference to their homes. One well-known office organization, for example, is located in an eastern city in a wholesale district, inconvenient to reach for anyone coming to it from almost any part of town. In a number of cases employees are known to have accepted positions with the company only until they could find work in an office located more conveniently to their homes. The net result is that the company has found it necessary to pay something more than the current market rate in order to make the employment opportunity an attractive one.

Advantages and disadvantages of suburban office location. In some cases the question arises as to whether a city or a suburban location for an office is better. There are advantages and disadvantages attached to both locations, but, as a matter of current practice, if the concern is a manufacturing company the selection of the office site depends more directly upon whether the office should be located at the plant site. If so, the plant location determines the office location. If the organization is non-manufacturing, or if it is advisable to separate the office from the plant, the office, almost invariably, will be located in the city.

While each situation must be decided, of course, on its own merits, the number of offices which are located in the suburbs is relatively small. Unless unusual factors exist, a city location is much to be preferred.

Selection of the building itself. Having decided upon the general neighborhood in the community in which office space will be sought, there next arises the question of selecting the particular building in which to locate. In this connection at least four factors must be taken into consideration: (1) the rental-cost factor; (2) the adaptability of the present arrangement to the present or proposed departmental layout; (3) the service facilities of the building, such as elevator service, both passenger and freight, janitor service, maintenance service, and so on; and (4) the character of the other tenants. Each of these factors deserves further specific

consideration. With the exception of the third, which is discussed in detail in the following chapter, they are considered below.

The rental-cost factor. By far the most important point to be borne in mind in connection with rental cost is the fact that the cost per square foot is not the only price of occupancy paid by the company. Consequently, space at three dollars per square foot may, upon analysis, be found to be just as cheap if not cheaper, in the end, than a site located elsewhere renting at two dollars and a half per square foot. A case in point of the effect of an error in judgment in this matter is to be found in the example of the office organization cited in the section (page 37) dealing with neighborhood changes.

Adaptability of space offered to layout. As has already been stated, a fundamental principle of good office location and layout is to select, as far as it is practical to do so, space which can be adapted readily to layout requirements, rather than to attempt to reverse the process by forcing the layout to adapt itself to a given space which is already arranged in a certain way. A smooth and continuous flow of work between the various departments comprising the office is essential to handling the work with dispatch. This important subject is discussed fully in Chapter 5.

Character of other tenants in building. Just as neighborhoods within a community have reputations, individual buildings carry with them prestige, or the lack of it. While it is true that real estate operators and brokers attempt to build up a certain reputation for a building and then utilize it in selling space, it is nevertheless a fact that the reputation and character of the building in which a company is located may well be a distinct asset or a definite liability.

The nature of the business of present tenants is the principal factor which makes or breaks the reputation of a given building. It is not very pleasant, for example, for customers who have occasion to visit the company offices to have to take their turn with a miscellaneous assortment of boxes and bundles on a combination freight and passenger elevator in order to reach their destination. Yet, if one locates an office in a building in which even light manufacturing is permitted, this may be the result. Well-appointed lobbies, good elevator service rendered by well-mannered personnel, and clean floors, all contribute to the general impression which the building makes on prospects, customers, and employees, and all have a direct effect on the good will which the business enjoys.

Selection of space within the building. The floor and the part of the building in which the offices are to be located is well worth considering. An eastern exposure is usually considered the best; a northern, the second choice; a southern, the third; and a western, the least desirable of all. The upper floors, say, the fifth floor or above, are, of course, regarded as more desirable, and consequently are more expensive, because of the better natural light and ventilation, as well as the smaller amount of street noise that reaches them.

In one case which recently came to the writer's attention, it was necessary to both soundproof and air condition an executive's office, at a cost of some $1300, simply because its location on the third floor, with southern exposure, facing a principal business street on which trolley cars operated, made it too noisy for conversation when the windows were open, and unbearably hot when they were kept closed.

The frequency with which customers and others call at the office is also a determining factor in selecting the space in the building to be occupied. Obviously, for example, few banks would consider a location on the upper floors of a building.

The opportunities that various possible locations within a building offer for future expansion is also an important point to consider. In planning a new location a company should provide definitely for the growth of the business for five years at least. It is also generally true, in the case of office organizations whose business is growing at a normal rate, that space requirements double at least every ten years. Consequently, space taken on floors in which additional offices will be available in the near future, rather than on floors where the balance of the space is rented for a number of years in advance, is preferable.

Location of executive offices of a manufacturing company. Industrial executives have given considerable attention to the question of whether, in general, better results are secured when the administrative or executive offices of a manufacturing company are located at the factory, or at a point some distance from it. This matter is especially important when the plant itself, because of specific conditions, such as nearness to a good labor supply, nearness to raw materials, nearness to markets, low taxes, or superior transporation facilities, is located in the country or in a town which is difficult to reach.

Decision on this point depends very largely upon the ability of the company executives and office departments to coördinate

their work successfully. There is also the question of the ability of major executives to secure and maintain adequate control over, and information about, activities at the plant. Although each case is a problem in itself, and no general rules can be laid down which are universally applicable, the tendency in recent years has been toward locating the executive offices and the plant at the same point. The advisability of this procedure is emphasized by the fact that in a number of cases companies whose offices were formerly located at a distance from the plant have later deemed it advisable to move to the plant itself.

Use of a weighted table to determine the best location. As a practical aid in arriving at an equitable decision regarding the best office location, and more particularly as a help in giving the various factors involved the proper relative weight, the use of a

Location Factors	Weight	Location A	Location B	Location C

Fig. 2.—Location Table.

simple table, as shown in Figure 2, will be found helpful. The procedure for preparing and using such a table is simply to list in the left-hand column, as shown, all of the factors which in any way influence the choice of the site. Each main group of factors is then given a weight, thereby enabling evaluation of all factors in terms of one another. For example, convenience to customers would obviously be an outstanding factor in the case of a retail-store location, and thus would be given a greater weight than any other single factor, and very possibly as much weight as all other factors combined. On the other hand, the question of convenience to customers in the case of a mail-order house would be of prac-

tically no importance, but nearness to railway, express, and mail facilities would be of the greatest importance. For the sake of convenience, the total weight assigned to all factors may be arbitrarily fixed at 100.

Having decided upon the total weight to be allowed each factor, the next step is to evaluate in accordance with one's own opinion the worth of the various sites under consideration. For example, assume that Columns A, B, and C in the form represent three possible locations. If nearness to outside service facilities carried a total weight of fifteen, one might assign a weight of eight to location A, ten to location B, and thirteen to location C, thus indicating that while none of the sites is regarded as perfect from the standpoint of nearness to service facilities, site C is better than either A or B. The last step, of course, is to total the individual weights in each of the columns and determine the one nearest the ideal location, that is, 100 points.

Features of an office lease. When the building itself and the space within the building have been selected, the next step is to take care of the legal matters connected with the leasing of the office. While this is a matter that in most cases the company will wish its lawyers to look into, it is desirable that the office manager have at least a general knowledge of the usual provisions of a lease covering office space, and of those things for which the owner is responsible and those for which the tenant is responsible.

Among the points which leases for office space usually include are the following:

1. Names of the parties to the contract.
2. Date of the contract.
3. Date and sometimes the hour at which the term begins and expires.
4. Description or designation of the space leased.
5. Rental and method of payment. Usually the annual rent is stated, subdivided into smaller units to be paid on specified dates.
6. Provisions regarding the rights and obligations of each party and what will be held to nullify the contract.
7. Signatures of both parties to the contract.
8. Acknowledgment before a notary if required by statute.

The items which the owner is expected to provide and those which the tenant usually provides are shown below:

Provided by Owner	*Provided by Tenant*
Elevators	Conveyors
Washrooms and toilets	Floor coverings
Lighting fixtures and wiring	Buzzers and annunciators

Provided by Owner	*Provided by Tenant*
Radiators	Intercommunicating telephones
Window shades	Ventilators and fans
Fire-protection apparatus	Awnings
Fireproof stairways	Clocks
	Water coolers or fountains
	Storage vaults
	Partitions and railings
	Electric lamps
	Lighting fixtures (other than the standard building fixtures)
	Towel and soap service
	Venetian blinds

Moving the office to the new location. Having selected the site and signed the lease, the last step is to move the office from the old location to the new. Plans for moving an office should be preceded by the preparation of a template layout showing the position of each piece of furniture and equipment in the new location. The subject of office layout, however, is taken up in detail in Chapter 5, and the discussion here, therefore, is confined simply to the work of moving.

Assuming that the proposed layout has already been decided upon, and that it has had the approval of the department heads and other executives, the first step is to tag each piece of furniture and equipment in the present office and to number each template on the layout chart accordingly. This gives those in charge a definite plan on which to work. In this connection it will be found helpful to assign a general number or letter to each room or bay in the new location. If more than one floor is to be occupied, the floor number should, of course, also be indicated. Thus, for example, in moving an office of any considerable size, the movers learn, after two or three trips, which location "14-A" is, and consequently know at once the general location of any particular piece of furniture. The specific place where each piece of furniture and equipment is to go, as shown on the chart, is then given them by the office manager's assistant in charge of that room.

A week or more before the day set for the actual moving, the office manager should provide each clerk with a set of specific detailed instructions which will tell him just what he is expected to do and how it is to be done. These instructions should include such information as how papers and miscellaneous desk equipment are to be packed and marked, where packing materials are to be

secured, what disposition is to be made of the completed packages, how desk drawers are to be locked or fastened in place, and so on. Similar instructions should also be prepared and issued to department heads and section supervisors; but naturally in this case more information will be given, together with a carefully worded request for their coöperation.

When these preliminary plans and instructions are completed, the office manager should select a sufficient number of competent persons to assist him and to act as guides for the movers on the moving day. These assistants may or may not be employees who are regularly under the supervision of the office manager, but they should be chosen with the qualities of ability to follow instructions, cool-headedness, and initiative uppermost in mind. The general plans, as well as the specific part which each one is to take in the moving, should be thoroughly and carefully explained to each one. Enough such assistants should be chosen so that there will be at least one man in every room in both the new and the old location, as well as one or two extra men for general purposes.

No matter how carefully thought out the preliminary plans may seem to be, there are almost always difficulties that may delay or even seriously upset the execution of the plans. Experienced office-moving companies can easily point out possibilities in this direction, particularly if their contract is for the job as a whole rather than by the hour. In addition, the office manager will do well to ask other office managers who have been through the experience before what unforeseen difficulties they encountered. While it is perhaps too optimistic to hope that all such contingencies will be foreseen and provided for, nevertheless, it is true that the more careful and scientific the planning, the fewer the chances of unforeseen difficulties interfering with the carrying out of the plans.

What to do on moving day. The work to be done by the office manager himself on moving day consists largely of supervising the execution of the prearranged plans. If the move is to be made between Saturday noon and Monday morning, as is sometimes the case, presumably only the office manager and those whom he has selected as his assistants will be on hand. If, however, it is necessary to move on a week day, it is best to dismiss the whole force for that day rather than to attempt to utilize their services in the moving process, as generally they will be more of a hindrance than a help.

It is important that during the moving day the office manager

himself stay in one place, or at the most divide his time between one definite location in the new place and another in the old one, so that his assistants will know where to reach him quickly if his advice is needed, as it surely will be. Anyone who has moved an office or assisted in that task will appreciate the difficulties which are almost sure to arise when there is but one person who can be called on for instructions to cover special cases, and, because he is constantly rushing back and forth between the old and the new locations, decisions must be delayed and men kept waiting until he can be found.

One practical plan is for the office manager to appoint one person as his first assistant. The office manager can then take general charge of the incoming equipment in the new location, leaving his assistant to supervise the movement from the old location. At the end of three or four hours the office manager should make a check-up on the equipment which still remains in the old office; at this time he can change places with his first assistant if that seems desirable.

When the movers have reported the last piece of equipment moved from the old location and placed in the new one, the office manager should verify this statement by a personal inspection. If conditions are found to be satisfactory, he is then ready to perform his last duty in connection with moving, namely, that of seeing that the mechanical equipment, such as telephone connections, buzzer and internal communicating systems, electrical office equipment, and so on, is in working order.

If the change of office location is being made between Saturday noon and Monday morning, the moving itself will, in most cases, be completed by Saturday evening, leaving the office manager all day Sunday in which to attend to these mechanical adjustments. Overtime rates for electrical and other skilled mechanics are, of course, rather high; but the office manager will be more than justified in including in his estimate of moving costs the wage of at least one competent mechanic and his helper, so that the necessary connections may be made before Monday morning. The cost of time lost by clerks and delays in getting the work started promptly in the new location will be found to be far in excess of any reasonable outlay for mechanics' wages for overtime work.

Theoretically, it should be possible to pick up the threads, so to speak, on Monday morning in the new location, just where they were laid down the previous Saturday noon in the old office, and thus continue the work in the usual way. One occasionally even

4

Physical Factors in Office Planning

The importance of physical factors. In choosing an office location, and more particularly in planning the interior layout, it is essential that adequate consideration be given to what are usually called physical factors. These include the size and the shape of the building, building facilities, storage facilities, lighting, heating and ventilation, including air conditioning, floors, floor coverings, communicating systems, partitions, noise-reducing facilities, and electrical facilities, as well as office maintenance. Although certain changes can be made, of course, after the space is occupied, each of these points should be carefully considered at the time the layout is being planned. Because of their importance, this chapter will be devoted entirely to a discussion of physical factors, while in the next chapter consideration will be given to making the office layout itself.

Size and shape of the building. There are several important factors regarding the size and shape of the structure itself which should be considered by any company which is planning the erection of a building of its own. Even if any substantial amount of rented space is to be occupied, they should be given careful consideration.

In deciding upon the amount of space needed, the total number of square feet is by no means the only consideration. Large rectangular areas obviously are preferable to long, narrow spaces, or to a series of small odd-shaped spaces. The shape of the building itself is also important. Buildings having the general shape of the letters U, H, T, or E are considered most desirable, both from the standpoint of their adaptability to the best interior layout and in connection with opportunities for future expansion. Moreover, such shapes insure maximum lighting and ventilation. Floors should be planned to facilitate the joining of several sections to meet expansion requirements, or, where adjoining ground is avail-

able, provision for the future may be made by planning so that additional wings may later be added. In other cases, provision may be made for the addition of stories.

Building facilities. Building facilities include freight and passenger elevators, wash rooms, toilets, and locker rooms.

It is almost trite to say that passengers and freight should not be carried on the same elevator. Convenience to employees and customers, and greater dispatch in handling both passengers and freight, as well as a vastly better impression on callers, are all obvious advantages of making this separation.

The problem of providing adequate passenger elevator service in an office building, however, is not always a simple one. This is particularly true in buildings occupied entirely by a single company, because in such cases there is a distinct tendency towards concentration within a very limited period of the time of arrival and departure. In one case, for example, congestion around the elevator entrances on the ground floor became so great that a rather serious problem of lateness developed. Investigation showed that sometimes as much as ten minutes elapsed between the time an employee arrived in the building downstairs and the time she was actually seated at her desk ready for work. As a result, a stagger system of departmental working hours was put into effect whereby certain departments started work at 8:30 and left at 4:30, others commenced at 8:45 and stopped at 4:45, and so on to the last group, who arrived at 9:15 and left at 5:15.

In large buildings the problem of congestion is usually satisfactorily solved by providing several banks of elevators, each of which serves only a given series of floors. Modern elevator equipment, including high-speed electrically operated cars, automatic door-opening and closing devices, and electric control mechanisms, whereby the car stops only on the floors from which a waiting passenger has signaled, also has materially increased both the capacity and speed of elevator service. One method frequently used effectively to modernize older office buildings is to install new elevator equipment. The leading elevator manufacturers have accumulated considerable worthwhile data on the subject of elevator arrangements, speeds, capacities, and so forth, and are always glad of an opportunity to coöperate with a present or prospective user of their equipment.

Coat rooms and lockers. The use of coat rooms, either centralized or provided for departmentally, in contrast to the advis-

ability of installing lockers, is a debatable point. It is generally agreed that the decentralized coat room or locker arrangement rather than the plan under which all employees check their wraps at a central point, is preferable, especially in view of the fact that a better control over the time spent by employees in getting settled down in the morning and preparing to leave in the evening is secured. The majority of buildings erected within the last few years have the decentralized or departmental arrangement.

Lockers provide perhaps the best method of taking care of coats and hats of employees in medium-sized or small offices. Any disadvantage due to the amount of floor space required may be largely overcome by use of a type of locker which consists of a group of three units and measures fifty-four inches in length, twenty-one inches in depth, and six feet six inches in height. Since the three units will comfortably take care of the belongings of eight people, it is apparent that less than one square foot of space per person is required.

Wash rooms. The decentralization of wash room and toilet facilities, so arranged as to serve adequately the needs of adjacent departments, is also regarded as the best practice, owing, again, to the closer control which can be exercised by department heads or section supervisors over the time spent by employees away from their desks. In no case should it be necessary for any employee to go more than one floor away to reach these facilities.

Storage facilities. The need for storage facilities is very frequently underestimated in calculating the total amount of space needed and the layout of departments within the space. Indeed, it may be truthfully said that the intelligent use of storage space frequently makes the difference between an orderly and effective office layout and one which is cluttered up so badly as to make expeditious procedure almost out of the question. If a new building is to be constructed, the entire space below the ground floor should be reserved for storage purposes, and the temptation to divert this space to the use of clerical employees should be discouraged. When space already constructed is being rented, however, there are a number of other devices which may be employed to give additional storage space. For example, if counters are necessary, counter-height file units may be installed, the space behind and under the counter being used either for vertical filing purposes or as storage space for miscellaneous supplies, depending upon the uses which the counter serves and the type of equipment

bought. In the same way space over wash cabinets, clothes cabinets, and telephone booths can be built over for storage purposes without detracting from the appearance of the room. These suggestions are based on the obvious fact that while a company pays for square feet, it actually gets cubical content.

Office lighting. Despite the emphasis which has been placed upon the importance of proper lighting to the quality and quantity of office production, a Dartnell Survey of twenty large representative offices in the Chicago area indicates that offices today furnish, on the average, only from 46 to 73 per cent of the minimum amounts of illumination recommended for office tasks by the Illuminating Engineering Society.[1] Office workers are not getting the light they need for efficient work; unnecessary errors, eyestrain, and fatigue are the result.

It is well recognized that the best possible light is daylight. Offices which have the largest amount of natural light, therefore, command a higher rent than those less favorably located. Twenty-five to fifty cents per square foot per year often represents the charge for daylight alone. However, natural light requires careful treatment in order that it may aid, rather than hinder, the office worker. On the south and west sides of the building the sunlight causes excessive glare during certain hours of the day. Venetian blinds should be used to deflect this light ceilingward, thus diffusing it. In addition, natural light does not penetrate in sufficient volume more than twenty or twenty-five feet from the windows. This means that in most offices certain areas must always be lighted artificially. The importance of lighting and ventilation is so great that several office buildings have been constructed entirely without windows, utilizing artificial lighting and air conditioning, thus attempting to control these factors without the interference of sunlight, temperature, and humidity. The offices of the Hershey Chocolate Company at Hershey, Pennsylvania, the United States Time Corporation at Middlebury, Connecticut, and the Despatch Oven Company at Minneapolis, Minnesota, are three examples.

There are five systems of light control, all of which are used in offices: [2]

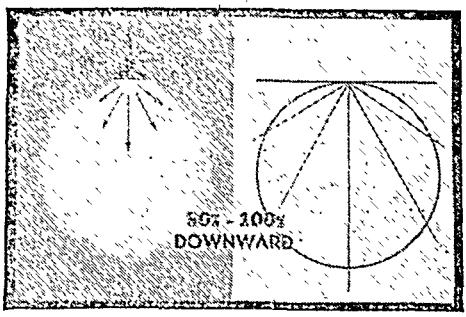


Fig. 3.—Direct Lighting.
Ninety to 100 per cent of the light is directed downward in angles below the horizontal.

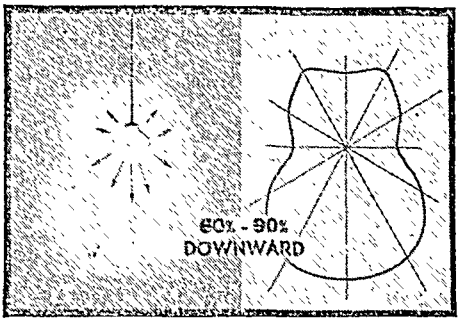


Fig. 4.—Semi-direct Lighting.
Sixty to 90 per cent of the light output is directed downward.

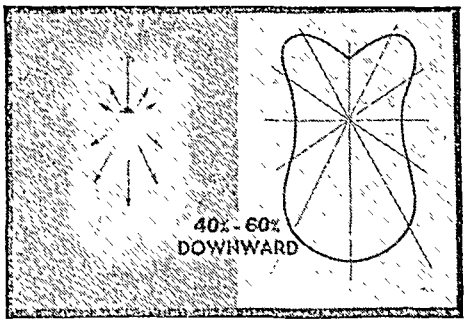


Fig. 5.—General Diffuse Lighting.
Only 40 to 60 per cent of the light is directed downward.

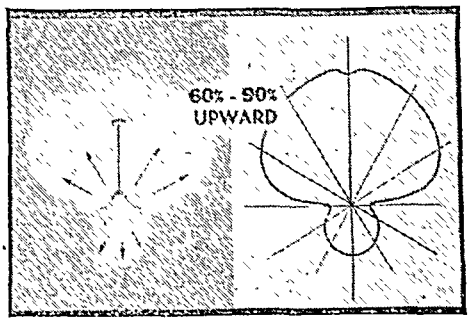


Fig. 6.—Semi-indirect Lighting.
Sixty to 90 per cent of the light is directed upward, in angles above the horizontal.

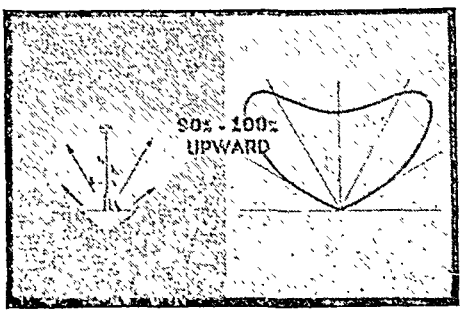


Fig. 7.—Indirect Lighting.
Ninety to 100 per cent of the light is directed upward.

Jim Know these
a question is about them know the
amount of light directed upward or downward

Light Terms and Their Measurement [3]

Illumination. The foot-candle is the unit of measurement of illumination and is defined as the illumination on a surface which is one foot distant from and perpendicular to a source of one candlepower.

The various models of direct reading photo cell foot-candle meters now available commercially may be used to measure this factor. Meters corrected for all colors of light are recommended and frequent calibration is necessary to maintain accuracy.

Foot-candle readings are used to designate the illumination on a surface at any point, or the average illumination on a surface. It is the most commonly used term to describe a lighting installation, but it should always be remembered that it only designates the quantity of light flux reaching a surface—it reveals nothing of the quality (diffusion, lack of glare, direction, color, etc.) of the illumination.

Recommended Levels of Illumination for Offices

Foot-candle levels in the following tables are to be regarded as "average in service" on the normal work plane whether vertical, horizontal, or at some oblique angle:

	Foot-candles Modern Practice
Bookkeeping, Typing, and Accounting	50
Business Machines—Calculators, Key Punch, Bookkeeping—Local Illumination	100
Conference Room—General Meetings	30
Desk Work	
Intermittent Reading and Writing	30
Prolonged Close Work, Computing, Studying, Designing, Reading Blueprints and Plans	50
Filing and Index References	30
Lobby	20
Mail Sorting	30
Reception Rooms	20
Stenographic Work—Prolonged Reading, Shorthand Notes	50
Vault	10

improperly shielded lamp (incandescent, vapor, or fluorescent) in line of view (direct glare); from (b) reflected highlights on shiny, polished surfaces (reflected glare); or from (c) large areas of relatively low brightness in direct view, such as might occur from inbuilt glass panels on low ceilings in a long room, or from unshaded glass block walls. These glare situations can be avoided by careful location of lighting equipment, by shielding all light sources, and by a proper balance of the brightness of all surfaces and lighting elements in direct line of view.

Objects which have a low intrinsic brightness may become glare sources when viewed against dark backgrounds. For instance, luminous glass panels inserted in dark ceilings or walls can readily become objectionable glare sources even though their average brightness expressed in foot-lamberts is low. Good practice demands that the brightness ratio between the luminous element and its background or surroundings shall not exceed three to one when seeing comfort is of major concern.

REFLECTION FACTORS OF TYPICAL COLORED FINISHES FOR INTERIORS

Color	*Average Reflection Factors**	
	Filament and White Fluorescent Lighting	Daylight Fluorescent Lighting
White	.88	.88
Very Light		
Blue-green	.76	.76
Cream	.81	.79
Blue	.65	.66
Buff	.76	.73
Grey	.83	.83
Light		
Blue-green	.72	.72
Cream	.79	.76
Blue	.55	.57
Buff	.70	.67
Grey	.73	.73
Medium		
Blue-green	.54	.54
Yellow	.65	.60
Buff	.63	.59
Grey	.61	.61
Dark		
Blue	.08	.09
Yellow	.50	.45
Brown	.10	.09
Grey	.25	.25
Green	.07	.07
Wood Finishes		
Maple	.42	.41
Walnut	.16	.15
Mahogany	.12	.09

* Due to the spectral differences of filament and fluorescent lamps and the selective reflection characteristics of the various colored finishes, two reflection factors are given for each color.

Next he installed new lamps, and the average foot-candles in the eight locations leaped to 35.5. As a final rejuvenating measure, he had the voltage corrected, and the average shot up to 46.2 foot-candles as compared to the original 11.8. The company had been paying for light it didn't get.

The office administrator will find the following profitable reading in terms of human maintenance as well as office efficiency. It has been demonstrated often that to neglect illumination not only cuts down facility for work and accuracy but also constitutes a general drain upon the physical system of the office worker.

This office lighting was delivering only 26.0 per cent when, according to the best illuminating practices, it should have been giving at least 75.0 per cent of the illumination that was available when installed.

"DO YOU GET AS MUCH LIGHT AS YOU PAY FOR?"

CHART OF BIRMINGHAM RESULTS

	Foot-Candles as Found	Foot-Candles after Cleaning Walls and Ceilings	Foot-Candles after Fixtures Cleaned	Foot-Candles with New Lamps	Foot-Candles with Corrected Voltage
Location 1	15.0	18.0	23.0	42.0	55.0
Location 2	14.0	17.0	21.0	41.0	55.0
Location 3	8.0	13.0	16.0	30.0	37.0
Location 4	10.0	14.0	18.0	32.0	41.0
Location 5	9.0	14.0	18.0	32.0	37.0
Location 6	10.0	13.0	16.0	30.0	40.0
Location 7	8.5	14.0	18.0	32.0	45.0
Location 8	20.0	25.0	31.0	45.0	60 0
Average	11.8	16.0	20.1	35.5	46.2
Average in percentage of maximum	26.0%	35.0%	43.0%	77.0%	100.0%
Percentage of increase due to each factor	...	35.6%	26.0%	77.0%	30.0%
Increase in percentage relative to total light as 100%	...	16.0%	13.0%	31.0%	14.0%

Color. The paint industry has recently introduced the new profession of "color engineering" to the American public. By tossing the popular fallacy "color is for decoration" into the waste-basket, the color engineer utilizes the energy in color to perform specific tasks and to pay dividends on its cost. As William W. Krug, of E. I. du Pont de Nemours & Co., puts it: [5]

The greatest benefit to the office worker is that color can be coordinated with artificial and/or natural light to create uniform seeing conditions.

[5] Krug, W. W., "Use of Color for Office Painting," *The Office*, March, 1946, p. 37.

Objectively, muscular eyestrain is reduced by creation of a color environment of an even brightness ratio. By elimination of sharp color contrasts, the constant pupillary adjustment so frequently experienced under prevalent working conditions disappears. The worker's visual acuity, not to mention his general state of health, is greatly improved.

Properly applied, color emphasizes important elements and subordinates relatively unimportant subjects; color shortens or lengthens the appearance of an area; color "raises or lowers" ceilings. By actual statistics and merchandising records it is well known which colors appeal most to the male and to the female; which colors quickly attract the attention of the eye. Color engineering takes all these facts into consideration, combines them into a plan with a purpose, and completely eliminates the distraction and confusion formerly prevalent when color guesswork was the theme.

buildings, has been enthusiastically accepted, and is widely recognized as an essential component of a highly efficient and productive endeavor. Color conditioning has a leading role to play in your organization and, thanks to this relatively new science of color engineering, its success is assured.

Heating, ventilation, and air conditioning. The fact that the proper heating and ventilation of an office have a direct effect upon the health and efficiency of office workers is well recognized. The matter of heating is usually well taken care of, except that there is a tendency to overheat offices. The ideal temperature for an office is sixty-eight degrees F. The development of methods of thermostatic control has largely done away with the exercise of individual preference in heating on the part of the clerk who happens to be sitting nearest the radiator valve.

Office ventilation and air conditioning, on the other hand, are still complex problems about which there is yet much to be learned. Fundamentally, the problem of the ventilating engineer is to introduce an abundance of fresh air and, after cleaning it and adjusting its humidity, to provide means for removing foul air, and to maintain a constant circulation of air without creating a direct draft. The fact that correct ventilation is important, however, is shown by the experience of a number of companies. For example, one concern computed the approximate loss involved through colds contracted by its employees, largely as the result of faulty ventilation, at twenty-four dollars per employee. Another manufacturer reduced the amount of winter sickness among his employees from 27 to 7 per cent by installing a ventilating system, after a thoroughly scientific survey had been made. In a third case, a New York banking institution, by furnishing proper atmospheric conditions, increased the output of each individual employee sufficiently to allow a reduction of 4 per cent in the working force.

While the installation and operation of ventilating and air conditioning equipment are highly technical matters with which the office manager is not usually expected to be conversant, he should be familiar with the types of equipment and systems available.

Ventilating Equipment

Wall fans—local areas.

Intake and exhaust fans—local areas.

Central ventilating duct systems with centrally located blower mechanism. Such systems might have equipment added to filter the air and heat it in cold weather—extensive areas.

Air Conditioning Equipment

Single office unit, operating at window. Intake fan, heating, and cooling equipment—local area.

Central unit. Equipment brings in air, filters, and washes it, adjusts the humidity, cools or heats it to the desired temperature, and circulates it through entire building or entire area of occupancy.

Floors and floor coverings. The type of floor covering best suited to an office is not merely a matter of individual taste or wish. Other considerations, such as fatigue, the elimination of noise, the general appearance of the office, durability, original cost, and maintenance expense, are among the factors which must be considered. The usual kinds of floors and floor coverings used in offices are carpets and rugs, concrete (painted and unpainted), cork, linoleum, marble, mineral compositions, plastic materials (usually asphaltic base), rubber, and wood. Quarter-inch battleship linoleum, various rubber coverings, and asphalt tile are most frequently used. Bare concrete is seldom used, because in a number of cases it has been thought that colds, rheumatism, and even tuberculosis have been contracted by persons forced to sit at a desk all day with their feet resting on the concrete itself. Rugs and carpets are chiefly used in private offices, although in a number of larger office buildings they are also used in foyers and hallways.

Communicating systems. It is often more economical, sometimes imperative, that provision for communicating systems be made in the early stages of office planning. A full discussion of the various systems available appears in Chapter 6.

Partitions and railings. The tendency is away from private offices and the use of small single rooms in which only a few clerks can be placed. In many banks, for example, department heads are placed out with their departments, while officers whose work brings them constantly in touch with customers are almost always located on the "platform" in the open. Further consideration is given to the question of private offices in relation to office layout in the next chapter.

If it is imperative that all noise be shut out from a room, plaster partitions must be used, since wood and glass are not entirely soundproof. Even in this case, however, such rooms usually contain transoms for ventilating purposes. While rooms with plaster partitions are fairly soundproof, they have the marked disadvantage of shutting out light from the other parts of the office. In addi-

tion, they take up more room than either wood or glass and are expensive to take down and practically impossible to move from one place to another. Wood and glass partitions, on the other hand, are usually built in sections and may be moved from one location to another. The glass used in partitions may be either clear or obscure. In recent years many companies have adopted partitions made of steel and glass, similar in design and outward appearance to the wood and glass structure. While steel is more durable than wood, it is also more expensive, and, since wooden railings are usually used in offices, the combination of steel partitions and wooden railings may not be desirable. Steel railings and gates, however, may be purchased to go with the steel and glass partitions if one so desires.

Spindle railings rather than solid wood panels are now regarded as the best, since the latter give the impression of heaviness and more quickly show wear. Posts for railings should not be fastened to the walls or partitions, but to the floor only. If the floor is of concrete, a steel rod may be sunk into the concrete and extended upward.

Noise-reducing facilities. The problem of noise reduction and sound absorption is becoming more and more important, because of the increasing volume of exterior noises in large cities, and because of the extended introduction of office machinery. Noise is a contributing element to fatigue, and it is, therefore, important that it be minimized as far as possible. Three types of treatment for walls which will aid in reducing noise are felt, Acousti-Celotex, and porous plaster. The felt method is the oldest. Cattle-hair felt, hair-and-asbestos felt, and a felt made from wood pulp are most often used. Under this method the ceiling surface receiving the treatment is first paneled with wood strips. The felt is then fastened between the wood grounds and covered with painted muslin, or perforated oilcloth. It is customary to leave an air space between the felt and the cloth. Acousti-Celotex is installed in tile form, the tile having sound-absorbing perforations. This is a semi-structural form of treatment and can be decorated with practically no change in efficiency. No cloth covering is required. The two best-known porous plasters on the market are Sabinite and Guastavino plaster. Other felts and acoustical tile available are Fibrestone, Fibretex, Sana-Acoustic, and the like.

Acoustical treatments are to be found in a number of large companies. A large department store in New York City, for example,

uses both the felt with the cloth covering and the Acousti-Celotex. A well-known manufacturing company uses all three available acoustic materials—felt, plaster, and fiber board.

Despite the important effect which undue noise has on efficiency, the office manager in the ordinary situation is likely to have some difficulty in securing favorable action on the matter by chief executives, largely because of their ignorance of the matter. However, there are a number of steps, some of which are relatively inexpensive, which he can take to reduce noise. He can:

duly expensive merely because the necessary electrical facilities are not available.

Other physical factors. In addition to those already mentioned, there are several other physical factors which must be considered in connection with office construction and layout. Among them are:

Buzzer systems. The number of call buttons, buzzers, and annunciation drop boxes should be kept to a minimum. Buzzer-call layouts are expensive to install originally, and expensive to move later on.

Drinking water. Unit drinking water coolers of the electric refrigerator or ice-cooler type are preferable to a central system piped to several locations. This is particularly true in periods of retrenchment where certain floors are vacated entirely and therefore the use of many outlets is lost.

Clocks. If wall clocks are necessary, individual electric clocks are preferable, from the standpoint of flexibility, to a central timing system. The original cost of central timing systems is relatively high, and changes are rather expensive.

Cashiers' cages, counters, and so on. Portable equipment, such as counter-height steel units and standard steel or wood and glass front partitions with wicket windows, present a good appearance, are inexpensive, and are easy to move, if necessary.

Shelving. Except in isolated instances where permanency can be guaranteed, the use of wooden shelving for supplies, counters, and so forth should be avoided. Standard steel shelving costs little more and can be moved easily.

Office maintenance. Where space is rented, the tenant, as has already been said, is not expected to do any current maintenance work. Where the building is owned or completely occupied by a company, however, maintenance becomes a problem of considerable importance. Since the building superintendent, who is in direct charge of building maintenance, often reports to the office manager, it is important that the latter have some knowledge of office-building maintenance matters.

The first step is to work out a plan of building inspection and maintenance that will adequately cover the various parts of the building and types of equipment which must be serviced, but which at the same time will keep maintenance costs within a reasonable limit. For example, it is obvious that the maintenance of clean lighting fixtures, ceilings, and windows is of very consider-

able importance and has a direct relation to office efficiency. For this reason a regular schedule of cleaning should be worked out, so that lighting fixtures are cleaned at least every two weeks and windows at least once a month, preferably twice a month. Similarly, the care and cleaning of lavatories and wash rooms is a matter which merits constant attention. Elevator maintenance is an obvious necessity, the importance of which cannot be too greatly stressed. The maintenance plan should provide for the periodic treatment of furniture in order to keep the wood surfaces in proper condition. X:8M H9 55524.

Floors, of course, should be swept every night. Sweeping, however, does not remove all the dirt, and, consequently, provision must be made for occasional washing or scrubbing. The office manager or building superintendent, however, should be sure that the scrubbing accomplishes something more than a more equal distribution of the dirt. In some companies the linoleum floors are scrubbed once a year with a soft cleaning powder and then mopped with clean water after the scum from the scrubbing machine has been sucked from the floor by a special machine. After the floors are thoroughly dry, a liquid wax is applied by using soft brushes on the same machine that was used for scrubbing. Once the floors are treated, no water is used on these floors until it is necessary to scrub them again, which is usually a year or more later. This system of treating floors is reported to have proved to be a practical time and money saver.

Cleaning activity in Rockefeller Center, New York. One of the largest individual office cleaning operations in the United States takes place within Rockefeller Center, New York, a unique "city-within-a-city," consisting of fourteen buildings, containing almost 5,300,000 square feet of rentable area, and housing 30,000 people. There are, of course, a great variety of tenants in these buildings, each having various characteristics and different requirements. Almost all of the tenants receive cleaning services in accordance with standard lease agreements.

According to Mr. George M. Hopkinson, Superintendent for Rockefeller Center, most of the cleaning work must be done at night because of the public character of the buildings and the fact that the offices are fully occupied during daytime. For this reason and because of the size of the development, it has been found more efficient to break down the cleaning work into more detailed and specialized operations than is customary in other buildings.

Particular care is taken in the selection of cleaning personnel. The ability to read and write is necessary so that orders may be properly executed. Whenever possible, promotions are made from within the organization: all women supervisors have been promoted from cleaning women. All candidates must pass a physical examination, and all but a few of the women workers are married with families to support.

Every effort is made to safeguard against accidents. A first aid hospital, supervised by a registered nurse and a doctor in attendance, is open continuously. All accidents must be reported and treated the day of their occurrence to prevent infection. This precaution has resulted in a very small percentage of accidents involving loss of time.

The cleaning personnel consists of 675 individuals, the great majority of whom are on night duty. The night force is headed by one night supervisor, two assistants, seven night foremen, and nine foreladies, making a total supervisory staff of nineteen for night work. The supervisor is responsible for all floors throughout the development. Night cleaning women perform all duties except rug cleaning, high dusting, partition oiling, partition glass cleaning, glass desk top washing, and spotting. These items are handled by special porter crews.

The supervisory staff for the day force consists of one day supervisor, two assistants, seven day foremen, one chief matron, one chief window cleaning foreman, and an assistant.

There are numerous male cleaning crews for the following duties: cleaning light fixtures, vacuum cleaning, high dusting, floor polishing, waxing and scrubbing, rubbish disposal, glass polishing, cleaning furniture and rugs, urinals, sidewalks, and wall washing.

Women workers report at 7:15 P.M. at central points, their hours being from 7:15 P.M. to 1:15 A.M. Supplies are issued by a storekeeper, and orders for midnight lunch are taken for later delivery to the workers in their place of work. Each woman works alone. The sequence of work is (a) emptying waste baskets into a sack, leaving the sack outside the elevators, (b) sweeping the floors or mopping where necessary, (c) cleaning ash trays, (d) dusting furniture and the tops of filing cabinets.

5

Making the Office Layout

The importance of layout. In practice, location, physical factors, and layout must be considered together. For our purposes, however, it has been necessary to deal with each separately. Location and physical factors have been discussed in the two preceding chapters. We are ready now to consider the matter of layout itself.

Ever since Mr. Taylor pointed out the importance of the proper layout of factory departments, industrial executives have given a great deal of attention to the place which each working section occupies in the plant. So important has this matter become that no experienced factory executive would consider the erection of a plant without giving very serious study to departmental layout.

Most businessmen recognize that careful attention should also be given to office layout. To appreciate the dollar-and-cents value of conserving office space, it is only necessary to point out that a saving of a square foot of space in fifty different places, such as aisles, hallways, private offices, and so on, represents a net economy of $1,000, assuming a cost of four dollars per square foot per year on a five-year lease.

Factors involved in office layout. The fundamental principles of an efficient and practical office layout can be easily and simply stated. The work should move in as straight a line or as continuously in one direction as possible, and the number of people employed on each operation should be properly adjusted to the amount of work to be done. It is obvious, for example, that, if operation C takes twice as long as operation B, assuming that the work goes from B to C directly, there should be twice as many employees in section C as in section B. If this adjustment is not made, constant congestion of work at operation C will inevitably result.

In practice, however, these ideals can rarely, if ever, be attained. The layout and construction of a well-planned mail-order house, however, is an excellent example of a case in which careful forethought and planning have made it possible to reach the ideal to a very considerable extent. In one such company, incoming bags of mail are opened on the top floor. From this point the various orders and records progress downward from floor to floor, through the merchandise stock rooms and other departments, to the street floor, where the completed order is assembled and made ready for shipment. While, of course, it is not always possible to secure as direct a flow of work as this, the office manager should keep the principle which this arrangement illustrates in mind when considering layout problems.

Existing departmental divisions. The main and the departmental divisions of a business constitute the basic structure upon which the layout of the departments should be planned. Related departments should be placed adjacent or close to each other. In a department store, for example, merchandising, publicity, control, and store operation constitute the four basic divisions of the business. The control function, however, may be further subdivided into general accounting, expense control, accounts payable, credits and collections, inventory, statistics, and general office management. The credit and collection department, for example, has need frequently to consult the bookkeeping or accounting department for information regarding the volume of purchases and payments of various customers. These two departments should, therefore, be placed near one another. On the other hand, if a centralized filing department or stenographic department is contemplated which will serve the executives of all departments, it should be placed in as central a location as possible.

Building around major departments. Consideration of major departments and their relation to office layout develops in turn another principle of office layout which is of very practical importance. This is the fact that, in planning for future expansion, one should provide for growth in major departments, rather than in minor ones. For example, the existence of a sizable bookkeeping department should not be considered the sole reason for anticipating still larger requirements for that section alone in the future. Rather, one should consider the financial division in its entirety, and thus think of the bookkeeping department, not as a unit in itself, but as a unit in relation to the size and work of the

other sections of the entire financial division and in relation to the probable growth of the company as a whole.

Flow of work. Closely related to the question of departmental divisions is that of the existing or proposed flow of work through the office. In every business one will find a certain series of operations around which all other activities in the office more or less revolve. For example, in a mail-order house the customer's order is the unit of consideration, and the major operations, therefore, have to do with the steps which are taken in dispatching the order. In an insurance company the receipt and transmission of an insurance application and policy form the dominating routine. While subsidiary or minor operations or paths of work which intersect the major one may exist, they should be regarded as activities of minor importance, in contrast to the major activities.

Analysis of the work to be done. From the discussion in the foregoing sections it is apparent that in order to plan an office layout properly one must consider not only the departmental divisions and the sequence of the major operations, but the number of employees and the volume of work. To analyze this situation fully and to ascertain for each employee and each working unit the kind and amount of work turned out, both regularly and periodically, is a very considerable undertaking. In fact, it is a task which, because of its very complexity, has been too largely neglected in the average office.

Private offices. The number of private offices to be provided, and their location, is a matter of obvious practical importance in making an office layout. The private-office question is a debatable one and, unfortunately, it sometimes becomes quite a sore point among company executives. There are many circumstances under which private offices are necessary, or at least extremely desirable. The work of the purchasing agent in a manufacturing concern, who is engaged in interviewing salesmen a good part of each day, is a case in point. The work of the copy writer or of the artist in an advertising agency is another example. The nature of the interviews which most corporation officials have with outsiders, as well as of the innumerable informal conferences with employees and subordinates, practically makes it necessary that such persons have private offices.

On the other hand, as stated in the preceding chapter, the tendency is away from the private office. More and more one will find department heads being placed out in the room with their sub-

ordinates, separated from them perhaps only by a railing. The old arrangement, whereby everybody who had someone else working for him assumed that he was entitled to a private office, is largely disappearing, and in its place is coming an arrangement whereby even high officials may be separated from others only by a railing, if indeed that. Banking institutions have led the way in adopting open layouts, and an increasing number of industrial and commercial organizations are following suit.

Obviously no general rule can be given which the office manager can use to determine which executives of his organization should have private offices. The most that can be said is that important business executives are gradually growing less insistent about their "right" to a private office.

Impression given by the office. While it is true that one should not decorate a place of business solely for show purposes, it is also a well-established fact that the impression which an office makes, both on the casual visitor or customer and on the regular employee, often has a direct effect on their opinion of the company. An arrangement, for example, which suggests at once efficient and businesslike methods cannot fail to create a better impression than one in which confusion, noise, disarrangement, and untidiness prevail.

Securing flexibility. The necessity for a business to adapt itself to changes and varying needs makes it imperative that proper provisions be made for flexibility in office arrangement. "Office layout would be a simple matter," said the office manager of a company which had just moved into a building of its own, "if the organization would only stay put. We have planned for expansion, of course, but if there is one thing that the experience of the past seven years has taught me, it is not a definite, permanent, scheme of layout, but the fact that flexibility is the soul of growth and progress." This executive then proceeded to explain that the adoption of a plan of interchangeable unit partitions solved the problem of layout for his company, the matter of space for future expansion having already been taken care of in the erection of a recently constructed building. One authority states that on the average the space requirements of an office organization double every ten years, while another sets a minimum of five years as the period in the future for which requirements should be anticipated in selecting a location and planning the layout.

between desks in a horizontal row should be; and what space should be left for aisles. The question of aisle space alone must be weighed from many angles. For example, to what traffic are aisles subjected? Are files moved through the office on hand trucks, is equipment shifted from place to place? In the final analysis, allocation of aisle space must be based on careful appraisal of office traffic.

Incidentally, the War Department recently established an allowance of 50 square feet per person for 54-inch desks, 60 square feet for 60-inch desks and 100 to 500 square feet per person in a private office. These figures represent a reduction from earlier War Department standards.

Making the layout itself. The first step in making the office layout itself is to secure the working tools. These include a drawing board or table, a lettering pen, a ruling pen, a straight edge, a cork board for mounting floor plans, cardboard for cutting out templates of furniture and equipment, and glass-headed tacks for fastening the templates to the layout chart. Figure 8 shows templates such as are used for the more usual kinds of office furniture. Similar templates should be prepared for all equipment, machinery, and appliances that will take up floor space in the proposed layout.

The first actual step is to prepare a rough sketch of the present layout, with each piece of equipment and furniture indicated on it. Following this, the main paths which the work follows under the present arrangement should be drawn into the plan.

The second step is to consider such rearrangements of departments, of work, or of employees as are planned for the new space. At this point it may be desirable to make a detailed study of the nature of the work of each individual. If this is done, revisions will doubtless have to be made in the sequence of operations as they will be performed in the new layout, or under the new system.

The third step is to determine what of the old furniture will be discarded, what will be moved to the new location, and what new furniture must be secured. Lists or requisitions are then prepared for the guidance of the purchasing department in placing orders for new equipment needed. Similar lists of mechanical office appliances must also be prepared at this time.

When it has been ascertained what people are to occupy the various departments and what relation, from the standpoint of the type of work, each department will bear to the other, a rough layout is prepared, showing the various spaces in the new building which the departments will occupy, and the approximate place to be occupied by each employee.

The rough layout chart should then be checked by the office

manager and the various department heads jointly, and any necessary rearrangements made. Before preparing the final draft, the office manager should be sure that all questionable matters of arrangement have been fully and definitely decided upon by all concerned.

When the best possible arrangement of individuals and departments has been worked out, the fourth and final step is to prepare the finished layout chart. In this connection the use of a scale of one-quarter of an inch to a foot will be found most practical. Templates should be cut out of cardboard to indicate the various pieces of equipment, and numbered, colored, or otherwise identified so that there will be no difficulty in ascertaining quickly the kind of equipment or appliance referred to. In making the final layout it will be much less work if one department is planned at a time and the final approval of the arrangement secured from each department head in turn.

The completed and final template layout should then be photostated or otherwise reproduced so that a sufficient number of copies will be available for use where necessary. The original cork board with templates attached, however, from which the photograph was made, should be retained for possible future reference and use.

A procedure of the kind just described, while it takes time and requires considerable effort, will be fully justified by the decreased confusion, decreased loss of time on the part of the executives and clerks, decreased moving expenses, and general increased ability to move from the old to the new office with the smallest practical amount of delay and inconvenience.

Typical layouts for modern offices. Mr. Harold C. Pennicke, former associate of the late W. H. Leffingwell, discusses the basic layout pattern of desks and files, as follows: [2]

Factors affecting space standards. There are many things which can cause a variation in any space per clerk standard. Some of these are:

1. The size of the desks used; whether or not all desks are of uniform size in the layout of any particular unit of space.

2. The type of layout used; whether desks are placed in rows of single desks, in rows of two desks adjacent to each other, three desks adjacent, or in rows of desks placed end to end, or rows of desks placed back to back, or a combination of any of these arrangements in the same work area.

3. The size of the area; if from 100 to 500 sq. ft. per area unit, the

[2] Pennicke, H. C., "Layout Standards for Modern Offices," *The Office,* March and April, 1945.

attainable standards may be much higher than in areas of 500 sq. ft. or more.

4. The shape of the space and the confining walls or partitions; in smaller areas the number of doorways and their placement is important.

5. The size and the location of any service facilities such as stair and elevator wells, lobbies and public corridors, washroom and locker room facilities.

6. Other obstructions such as location of columns, heating and ventilating pipes, ducts and radiators.

7. The shape and size of bays and the placement of window openings; whether windows are located on one side, two sides or on three or four sides of the area.

8. The character and effectiveness of natural or artificial lighting; adequate artificial lighting, especially the fluorescent type, may make it possible to disregard the placement of windows as a natural light source except to see that the desks are not faced toward the light source.

9. The relative amount of space consumed by bulk equipment such as an unusual concentration of files as in a filing or in an accounting department as compared with the space required for clerical occupancy; mechanical equipment like tabulating, addressing or photocopying machines, can consume space entirely out of proportion to space required for clerks.

The above list, although comprehensive, is not necessarily complete as to all items which may affect the ultimate attainable space standard provided the best application is to be made of layout standards. In Figure 9 are shown the five principal arrangement plans (Plans 1 to 5), all based on using twenty-four 60″ x 34″ desks in the most common arrangements with each layout made according to the best rules of layout to provide adequate spacing between desks, with either direct access to an aisle for each clerk or a spacing allowance which would provide access without interruption of other clerks.

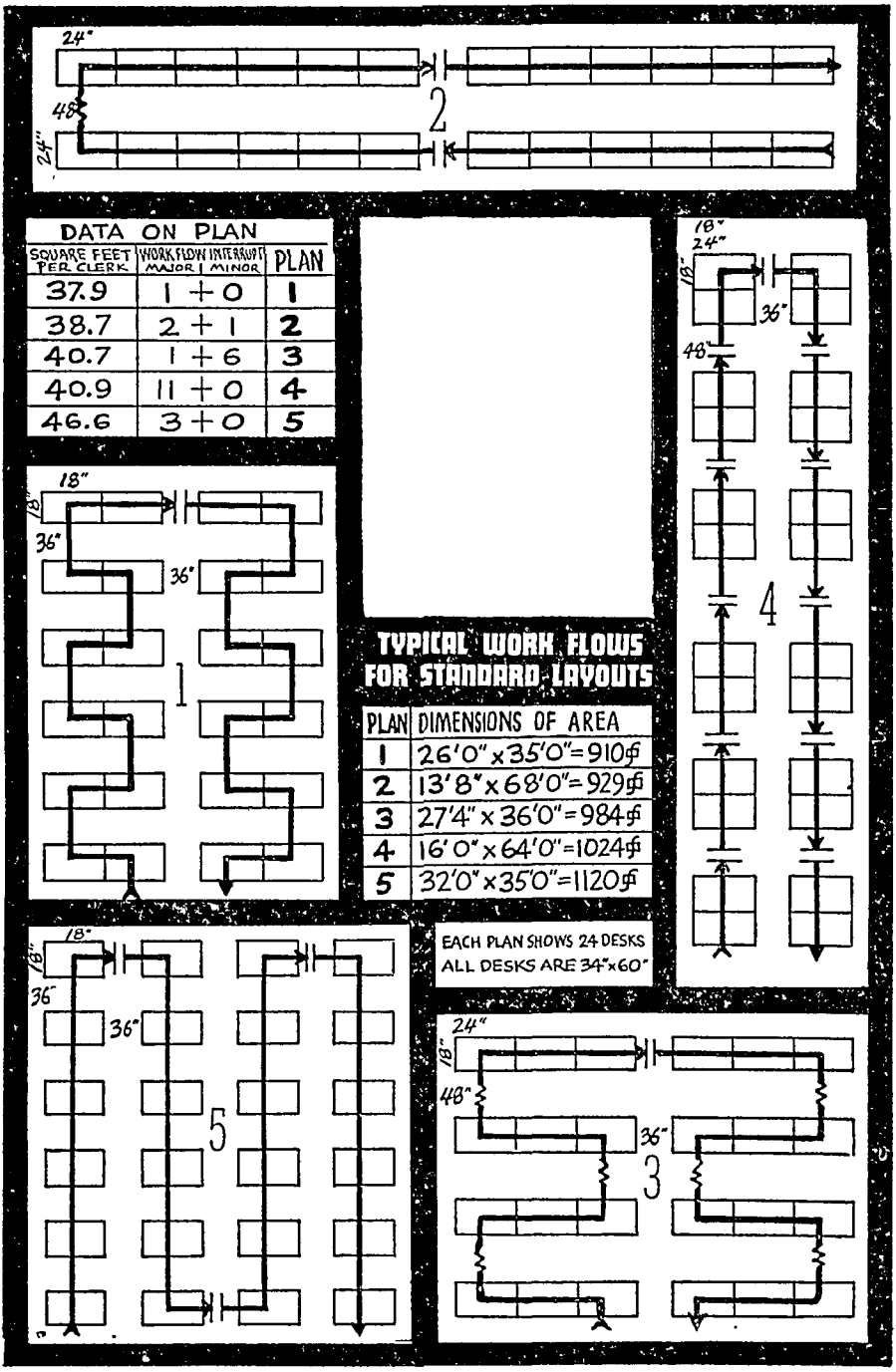


Fig. 9.—Typical Desk Layout Plans.

in buildings especially designed for clerical occupancy. It takes only a superficial examination of the figures to indicate that a standard of 50 sq. ft. per clerk, if it includes only the desks, chairs and necessary communicating aisles, is difficult to attain except under the most favorable circumstances. It can be attained in large areas of unobstructed space but only infrequently in smaller areas below 500 sq. ft. There-

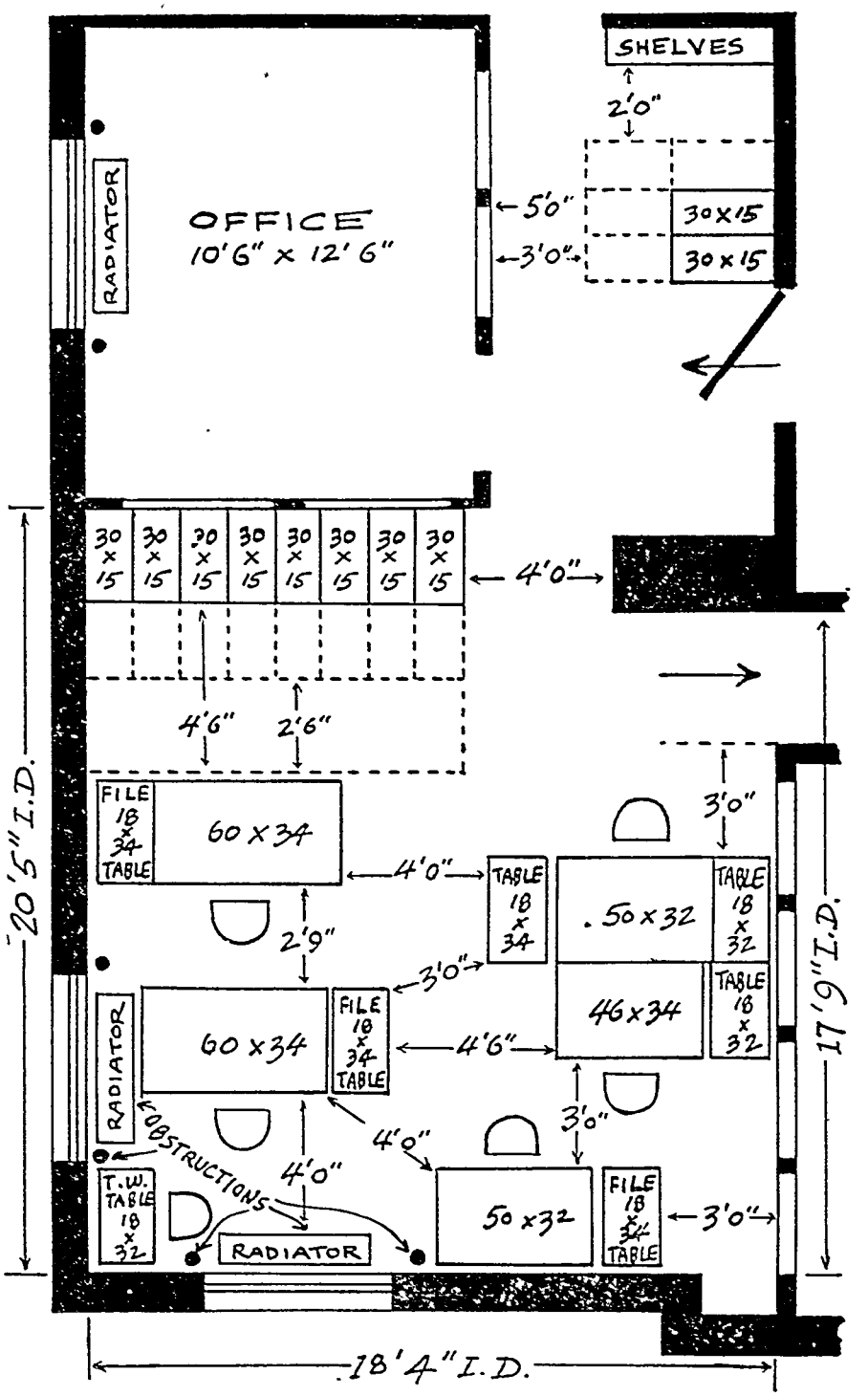
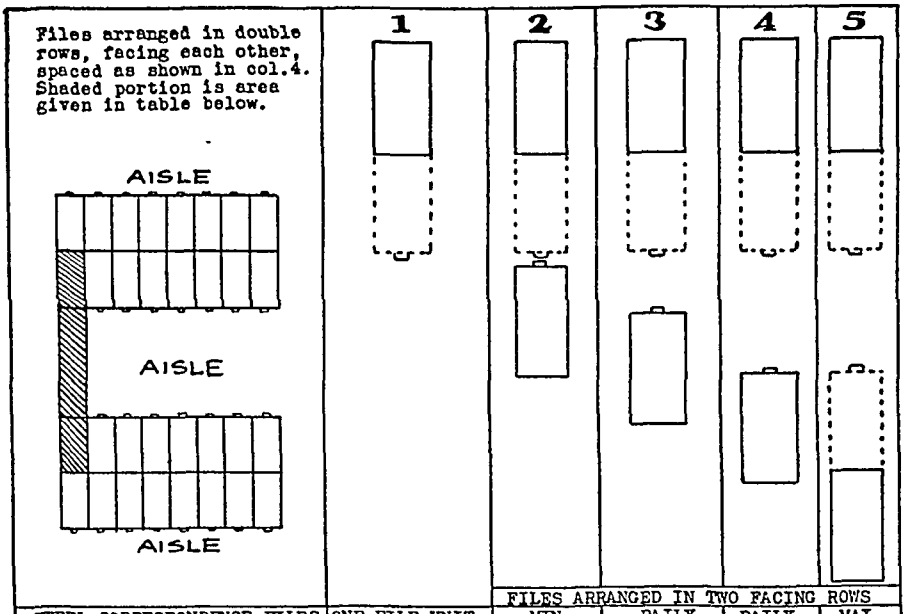


Fig. 10.—Actual Layout of a Small Area, Showing the Use of Templates.



STEEL CORRESPONDENCE FILES 4 or 5 Drawer Type	ONE FILE UNIT MIN. REFERENCE	FILES ARRANGED IN TWO FACING ROWS: MIN. REFERENCE	DAILY INFREQUENT	DAILY FREQUENT	MAX. USAGE
*Depth of file in 1st row	30"	30"	30"	30"	30"
*Extended drawer, 1st row	28	28	28	28	28
Space for operator	0	0	18	18	18
Space to pass	0	0	0	18	18
Space for operator	0	0	0	0	18
*Extended drawer, 2nd row	0	0	0	0	28
*Depth of file in 2nd row	0	30	30	30	30
TOTAL LINEAL INCHES	58	88	106	124	170
SQUARE FEET CONSUMED (a)	6.0	9.2	11.0	13.0	17.7

*These dimensions may vary slightly according to the make and style of the filing unit used.

(a) If the width of the file is taken as 15 inches, the square feet consumed by the files and spacing allowance would be as shown.

Fig. 11.—Typical File Layout Plans.

to 36" to permit other clerks to pass the filing clerk without disturbing her.

In large concentrations of filing units it is usually most economical of space to place the files in rows facing each other. For each two of such facing rows used in a layout the lineal inches and used area would be as shown in Figure 11 for files of the dimensions given.

The following illustrations will show how the square footage shown in the table can be used for space estimates of large or small concentrations of correspondence filing units:

For a single row of dead storage filing units use the amount, 6 sq. ft., shown at the bottom of Col. 1 and multiply this figure by as many files as may be used in each row of the layout. Thus, a row of 9 files would consume 54 sq. ft.; two rows of 9 files each would consume 108 sq. ft.

For each two rows of files arranged to face each other but used daily and for frequent usage, use the figure 13 sq. ft. (Col. 4) and multiply it by the number of files in one of the two facing rows. Thus if there were 20 files arranged in two facing rows of 10 files each, multiply the 13 sq. ft. by 10 and the result, 130 sq. ft., would be the space consumed by the 20 files placed in this arrangement.

Space computations for other bulk equipment can be obtained by measuring the overall area consumed by the equipment when arranged in operating position and adding the area required by the operator and the area required for an access aisle provided the equipment is not located adjacent to a regular communicating aisle in the proposed layout.

Make a schedule showing the area required by the clerical staff separate from the area required by bulk equipment. The total of these two figures will be the total estimate of space required for the clerical staff and its equipment. Arrangement of the figures by department or other organization unit will prove most convenient when using the schedule for the actual making of the layout.

6

Office Equipment and Appliances

Dependence of the office on equipment and appliances. One has but to consider for a moment the tremendous dependence placed upon equipment and appliances in any office to realize at once the important part which these devices play in facilitating the handling of work in the modern business office. While the mechanizing of office operations has not kept full pace, perhaps, with the progress that has been made in factory work, recent years have witnessed cumulatively increasing attention to this subject.

In this chapter the advantages of using modern equipment and appliances, selection methods, standardization, usage, recording purchases and costs, and care and upkeep are discussed. Because of the expansion in the field of equipment and machinery, it is obviously impossible to describe, even briefly, the various appliances which are available. Instead, a brief description of each class of machine or equipment will serve to acquaint the reader with the possibilities of the equipment. For those who desire more specific information about individual machines, the *Office Machines Directory,* published by the National Research Committee of the National Office Management Association, provides a listing of the names and addresses of the manufacturers of the major types of office machines.

Reasons for increasing importance of office machinery. There are a number of reasons why machinery is of importance to the business office. For one thing the size of business organizations and the increase in clerical activities have made it necessary to find quicker and more effective ways of getting the office work done. Obviously, the use of modern office machinery is a distinct aid in this connection. Imagine, for example, the number of additional clerks who would be needed in the accounting department alone if no calculating machines were available! What would the modern office do without dictating machines, postage machines, cash registers, or punch-card equipment? No extended discussion is needed

to emphasize the absolute dependence of offices on equipment and appliances of all kinds.

Furthermore, business organizations are finding more and more that it is necessary to secure a great amount of detailed information of a statistical nature regarding the operation of the business and the work of their employees. In the field of sales management, for example, many companies analyze sales by salesmen, by territories, by customers, by price classes, by the average profit, and calculate the cost per call per salesman. It is obvious that such information is extremely valuable, but it is also equally apparent that the use of mechanical office appliances is essential if such information is to be secured quickly and at a reasonable cost.

The appliance manufacturers themselves have promoted business and general public interest in office machinery by extensive campaigns of local and national advertising, and through the National Business Shows. At these exhibits, which are held annually in a number of the larger cities of the country, including New York and Chicago, office equipment and appliances of all sorts are shown. Expert operators are on hand to demonstrate the machines, and sales representatives are ready and eager to answer any questions. All of the exhibitors issue free tickets of admittance to customers and prospects and, as a result, the exhibit rooms are usually crowded at all times during the week of the show. The results which may be secured from an exhibit at the National Business Show by equipment manufacturers are shown in the statement made to the writer by the sales manager of one exhibiting company, who said that out of eighty live prospects developed as the direct result of the Show, thirty-five had been sold within one month and, if past averages held, fifty out of the original eighty would buy eventually.

Advantages of using mechanical devices. Among the advantages which accrue to an office in which the maximum use is made of mechanical devices are the following:

1. Records can be produced more conveniently, more quickly, more legibly, and with a better appearance than in cases where the same work is done by hand.

2. Owing to the fact that the installation of a machine often permits a reduction in the number of employees engaged on a particular type of work, general overhead expenses are reduced and the machine may very likely pay for itself within a short time.

3. The standardization of methods and processes, which neces-

sarily accompanies the use of a machine, makes it possible to employ less expensive labor.

4. Since most office appliances require an operator more or less specially trained for the work, the adoption of a machine brings about specialization, which, in turn, produces more work.

5. Owing to the fact that information of a statistical nature is more easily made available than when hand methods are in use, it is possible to secure a greater amount of periodical information of a statistical nature because of the ease of collecting it.

Procedure in selecting the proper equipment. When considering the purchase of any automatic office appliance, the office manager should constantly bear in mind the fact that production capacity, operating speed, operating upkeep costs, and the length of life of a machine can be measured with considerable accuracy. Consequently, there is no reasonable excuse for an office manager's buying a machine merely because others have told him that they have found it effective in their work, or because many of his friends have such machines in their offices. Such recommendations are helpful and useful, of course, but their importance should not be overestimated. Moreover, it is important to bear in mind that the popularity of a particular make or type of machine does not necessarily mean that it is the one best suited for a given situation.

The limitations of an office machine should be investigated as well as its advantages, which are generally more thoroughly exploited. In this connection, it is highly desirable that the office manager determine for himself, by means of a personal investigation, just what the experience of others has been with the device in question. A man does not buy an automobile solely on the word of the sales representative. Why should he be less careful in purchasing an office machine, especially in view of the fact that it may cost as much as or even more than the car?

Because the accomplishments of automatic office equipment can easily be ascertained, it is only common sense that the office manager have the actual performance of any machine he is considering demonstrated on his own work. All office-appliance companies are more than glad to have an opportunity to demonstrate the features of their particular product without charge to the prospect. Indeed, in many cases, a liberal free trial period under actual working conditions is offered. Consequently, under no circumstances should a machine be permanently installed until after it has proved itself to the satisfaction of everyone concerned.

Another point, which it is important to bear in mind in connection with the purchase of an office machine, is that it may be necessary to make changes in the system of record keeping in use before the machine can be used effectively, if at all. Obviously, for example, a firm cannot change from hand posting of accounts to a system of machine posting without making certain changes in the size and form of the ledger sheets used. Changes in bookkeeping methods also may be found necessary. While no one would argue that all systems of record keeping are perfect just as they stand, it is obviously important to consider this matter carefully before making a purchase that will necessitate important changes in present procedures.

Two specific cases. While the selling price of an appliance is, of course, an important factor to be considered, it is not necessarily the most important one. Two cases, which came to the writer's attention, illustrate what is meant.

In one instance the nature of the clerical work performed in the main office of a large construction company necessitated constant calculations involving multiplication and division. Various calculating machines were investigated, and finally one costing several hundred dollars was purchased and installed in the office. The work was handled at a somewhat greater speed than when it was performed by hand; but, because only one employee could work at the machine at a time, the office manager still felt that increased facilities were necessary. He hesitated to recommend the purchase of a second calculating machine, because of its relatively high cost.

One evening he casually mentioned his problem to a friend—an engineer. "Why don't you provide each employee with a slide rule?" said his friend. "They are not expensive, they can't get out of order, and anyone can learn to use one in a very short time." The office manager agreed that that was an excellent suggestion. The next day he investigated the feasibility of furnishing each employee in the particular group with a slide rule, and a few days later he put through the order. Fortunately, he was able to transfer his high-priced calculating machine to the statistical department, so that the company did not suffer any great loss by his ill-advised initial purchase.

On the other hand, the case of a well-known manufacturing concern illustrates the poor judgment often displayed in refusing to consider the purchase of a machine simply because the price is relatively high. In this company the products are so varied in

number, and, in many cases, are assembled from so many separate parts, that it is necessary to keep several thousand stock-record cards. Because of the nature of the business, it is also essential that these cards not only be kept accurately, but that they be kept posted up to date at all times. Four clerks, at an average salary of $35 a week apiece, were spending their entire time in posting the stock records by hand. In addition, a fifth employee spent part of his time supervising the work.

Various business acquaintances had urged the department head who was in general charge of this work to buy, or at least to try, a certain make of mechanical device. The price of this machine was $1,000. The department head persistently refused even to consider the device, saying that because a request for two typewriters costing but a fraction of the price of the stock-card posting appliance had recently been questioned, he was sure that he could not get permission to spend $1,000 for one new machine, no matter how good it might be.

"Let's look at it another way," said one of these friends one day. "We know, from the records of performance of this machine under similar conditions in other firms, that with it one person can do the work which it now requires four clerks to handle. To be conservative, assume that it will be necessary to pay this one person $40 per week instead of $35. This means that in direct salary costs alone you can save, week in and week out, practically the entire salary of three employees—$100 per week, to be exact. Even making a liberal allowance for depreciation, repairs, and general carrying charges, including, if you wish, interest at 6 per cent per year on the $1,000, the machine will more than pay for itself inside of four months."

Needless to say, not only was the department head convinced, but he had no trouble in making his superior see the ultimate economy of installing the machine.

Equipment as an investment. These illustrations clearly emphasize the fact that money spent on the purchase of mechanical office devices should be regarded as an investment rather than as a non-productive expense. In the commonly accepted interpretation of the word, an investment yields a continually profitable return. In the case of the calculating machine cited above, the return on the investment was entirely too small to warrant its purchase. In the other instance, the department head took an entirely wrong attitude toward the $1,000. As soon as the in-

vestment aspect of the matter, rather than the immediate cost, was presented to him, he saw the whole situation in a different light.

Securing maximum usage. There is still another aspect of the matter of installing mechanical office devices which should receive more attention in practice than it sometimes does. Often one will find that a mechanical device was purchased at a time when all signs pointed to its necessity and usefulness. Within a few months, however, the machine may be found to be standing in the corner accumulating dust from lack of use. Those who were originally expected to operate the machine are not using it, but have reverted to the methods previously used, often because they feel that the new machine is more bother than it is worth.

Before purchasing any mechanical office device, the office manager should be very sure not only that a definite need exists for the machine, but also that those who are to use it are fully sold on its purchase. In one well-known company, for example, most suggestions for the purchase of new devices come from the workers themselves. It is fully understood by everyone that, no matter how much time the machine may save or how many less employees may be needed on the particular operation, no one will lose his position on account of the use of the machine. Obviously all of the advantages accruing to the company which installs modern office machinery are lost, if, after the appliance is purchased, it is not used.

It is also of the utmost importance that those who are to operate the machine be thoroughly instructed in the details of its operation and in regard to the variety of operations which it will perform. There is, for example, a make of calculating machine which adds and subtracts directly, and on which multiplication and division calculations may be easily performed. In many cases, however, 50 per cent or less of the maximum possible usage of the machine is secured, due to the fact that the operator has not been fully instructed in division and multiplication methods. Such a situation is the fault both of the manufacturer's representative and of the office manager. Obviously it is one against which both should do their utmost to guard.

A machine utilization survey. The following plan, advanced by E. H. Conarroe, of the Metropolitan Life Insurance Co., is comparatively simple to carry out and will yield all the information needed to enable a company to achieve maximum use of its equip-

ment. Although it was developed as a typewriter survey, it can be applied to any class of office machine.[1]

A fundamental principle of management is that action must be based on facts. Before an intelligent approach can be made to the problem of better typewriter utilization, it is necessary to establish certain basic facts. We must know, first, the number, type and location of typewriter equipment presently available for use, second, the extent to which the machines are being used (both in terms of the period of the day or week and the proportion of time in actual operation), by whom they are used and the nature of the work for which they are used.

It is unlikely that authoritative information along these lines is available in most companies. It can readily be developed, however, through a specially planned survey. A survey for this purpose need not be elaborate. It can be conducted with relatively little difficulty.

The first requirement is a complete inventory of available typewriter equipment. This is a simple matter and calls for no very special procedure. I think it is the practice in many companies to maintain a current record of office machines and equipment, including typewriters. Frequently this is set up on a card record form with a separate card for each machine. The record shows, in addition to the general description, model, size and identification number, the date and cost of acquisition, location and in some cases a record of repair and maintenance services. If a record of this kind does not exist it can be set up quite readily. It establishes your available supply.

The second step is to determine the extent and manner in which these machines are being used. For this purpose I suggest a simple time analysis form similar to that reproduced on the accompanying chart. (See Figure 12.) This, in addition to the machine identification number and location, provides for recording the actual starting and stopping time and the elapsed time, whenever the machine is used. The nature of the work performed and the name of the operator are also recorded. One of these forms would be kept for each individual typewriter. It need only be kept for a test period. The period should be sufficiently long to provide a fair sample of experience, however. In some instances, one or two weeks may suffice—in others a longer period may be necessary in order to cover a full cycle of work. On the illustrated form (Figure 12) I have shown a typical report for one day.

The information recorded on the individual time analysis forms can be summarized in various ways and will permit some very interesting and practical analyses to be made. Often it will bring some surprising and unsuspected conditions to light. Figure 13 illustrates one method of summarizing the information. This presents the picture rather graphically. This chart simply lists down the side the individual typewriters and shows horizontally the hours of the working day. By filling

[1] Conarroe, E. H., "A Survey of Typewriter Utilization," NOMA *Forum*, National Office Management Association, February, 1943, p. 11.

in the time during which the machine was in operation (on the order of a Gantt chart) a rather complete picture of the typewriter utilization situation is presented. The data recorded are purely hypothetical but they reflect a reasonable situation. With this picture before him the office executive is in a position to work out some very practical approaches to his typewriter utilization problem. It reveals, for instance—

TYPEWRITER TIME ANALYSIS

Machine Number 1

Location Stenographic Dept

DATE	TIME			NATURE OF WORK	OPERATOR
	Start	Stop	Elapsed Min		
10/5	9 00	9 45	45	Typing Manuscript	A
	10·00	10 15	15	Copying Letters	A
	11 15	12 00	45	Transcribing Dictation	A
	1 00	1 45	45	" " " "	A
	2 45	3 45	60	Typing Monthly Reports	A
	4 15	4 30	15	Copying Report	A

Fig. 12.

(a) The per cent of total available working time that each machine is actually operated. This shows the unused capacity and provides a basis for the reassignment of machines, if necessary.

(b) It brings to light regularly recurring intervals when certain machines are not in use, which might provide a basis for work scheduling and doubling up on machine utilization.

(c) It shows graphically the idle facilities available for use through the staggering of lunch periods and starting times for individual operators. This is quite conspicuous on the chart. Note that under the plan of uniform lunch periods in effect all of the typewriters are idle from 12 to 1 every day. If the work were rearranged so that the 12 individually assigned machines were used during this period alone it would be equivalent to adding one and a half typewriters. Notice also the cases of machines 13, 14, 15 and 16. These are all what I would call "convenience" machines. None is used as much as one-third of the time. It would seem that one or two general machines conveniently located might be substituted for these.

These observations are cited merely as illustrative of the manner in which this survey material can be applied to the solution of the typewriter utilization problem. They do not exhaust the possibilities by any means. A refinement of the analysis shown might be to provide a series of lines on the chart, one under the other, for each day of the week, in order to show variations or consistency in the time of machine idleness. Also, different colored lines might be employed to indicate

different types of work, such as transcription from notes, statistical reports, typing from manuscripts, order writing, etc.

Another form of analysis that is possible from a survey of this sort is an analysis of the types of work for which typewriters are used.

ANALYSIS OF TYPEWRITER UTILIZATION

MACH. NO	ASSIGNED TO	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	TOTAL MINUTES IN USE	% OF TOTAL TIME IN USE
1	A									215	45
2	B									130	27
3	C									205	43
4	D									210	44
5	E									225	47
6	F									265	55
7	G									195	41
8	H									165	35
9	I									265	55
10	J									215	45
11	K									300	63
12	L									265	55
13	CARD RECORDS									90	20
14	FILES									145	30
15	MAIL DESK									60	13
16	RESEARCH STAFF									140	30
17	GENERAL - LARGE CARRIAGE									60	13
18	GENERAL - POSTER TYPE									85	18

Fig. 13.

Provision for recording of such information is made on the individual typewriter analysis form. If desirable, however, this could be amplified somewhat. The third chart, Figure 14, shows a suggested form of report that will provide more detailed information and will permit a more detailed analysis from this standpoint. If carefully kept for a representative period this form will provide a record of all material prepared on a typewriter. The analysis of such a record might serve to locate typewriter uses which can be eliminated either through discontinuance of the material typed or through the substitution of some alternative method.

TYPIST REPORT

NAME_____ DEPT._____

List below all routine copying required as part of your daily work
Fill in all columns as shown This report will be collected later

DATE	TYPE OF RECORD COPIED (EX-LETTER-CONTRACT-SPECIF-STATISTIC)	SIZE RECORD COPIED LETTER-LEGAL-CAP OR CARD SIZE	NO PAGES COPIED	NO COPIES MADE	WAS COPY PROOF READ

Fig. 14.

Standardization of equipment. The two principal practical advantages gained by a company that standardizes on a particular

make and kind of equipment are greater efficiency of operation and economy of purchase. If, for example, all the typewriters and dictating equipment in the office are identical, it is obvious that no time is lost by employees in learning how to operate the equipment when they are transferred from one department to another. Furthermore, by concentrating purchases on one make of equipment, companies often can secure equipment at lower unit prices by taking advantage of quantity discounts or long-term purchase contracts. Standardization also may result in a net saving in the amount of equipment needed, because all units are interchangeable. In addition, maintenance and repair costs are likely to be reduced.

correlation of use of general forms; to keep informed currently concerning departmental and commercial use of developments of office equipment and supplies."

Standards established by the committee are published in a catalog of Office Equipment Standards and circulated to all departments and associated and subsidiary companies. The committee also furnishes information concerning non-standard items recommended for use at particular locations or under special conditions.

It has been found expedient to organize three subcommittees composed of departmental staff members to deal specifically with studies of furniture, appliances, and supplies. These subcommittees have made studies of furniture, appliances, and supplies which have greatly increased our knowledge and ability to make more effective use of commercial items. They have also set up complete standards on furniture, such as desks and chairs; appliances, such as typewriters; adding and accounting machines; and supplies covering the entire field of materials used in the office.

The subcommittees carry on practical tests and laboratory experiments. They meet at frequent intervals to formulate definite recommendations to the Main Committee and to report on the status of uncompleted assignments. These recommendations and reports are in the form of minutes of meetings which are considered by the Main Committee at each meeting, usually held monthly. If recommendations are acceptable to the Main Committee, standards are established and made effective through publication in the catalog. Otherwise, recommendations are returned to the respective subcommittee for further action or consideration. Uncompleted items are considered, and comments, requests for special attention, and the like are given to the subcommittees.

As a part of its catalog, the committee issues a "Reproduction Process Manual," dealing with various methods of reproducing office matter and the conditions under which they are applicable economically. The committee also sponsors the preparation and publication of a manual dealing with correspondence standards and related mailing practices.

Care and maintenance of office equipment. The average office has a sizable investment in furniture and machinery which must be safeguarded. If it is neglected, depreciation is rapid, the value of the investment shrinks, breakdowns occur, production is interrupted, and office expense increases. The increased mechanization of the office has made the maintenance function increasingly important. The failure of an important machine may result in holding up the work of an entire unit and, quite possibly, the work of the manufacturing plant. Office maintenance that anticipates trouble and prevents such interruptions plays an important part in reducing office costs.

erally speaking, it is economical to adopt this plan only when an estimate of the cost of maintenance paid to outside firms exceeds the salary of a first-class mechanic, plus other expenses such as rent, light, and depreciation on the machinery in his shop. However, other advantages are present which are not susceptible to measurement on a dollars-and-cents basis:

a. Immediate service is available.
b. Equipment receives attention before breakdowns occur.
c. The mechanic, rather than an outside vendor, recommends trading-in of equipment.
d. Assignment of equipment on the basis of condition and the necessities of each job is controlled much more readily.
e. All the equipment receives regular inspection and service, rather than just those items which can be covered by service contracts.

2. *Maintenance contracts.* Under this plan, the company signs maintenance agreements with either the vendors of the equipment or service firms. Rates are based upon the number of units under contract, the frequency of the inspection trips, and the nature of the equipment serviced. One very important advantage of this plan is the regularity with which inspection and cleaning occurs. This is governed by the vendor, who must furnish the service in order to collect the fee. Another advantage lies in the fact that maintenance expense is predetermined by contract and the responsibility for the work is shifted outside the organization.

3. *Non-contract service.* Since new machines usually are covered by a guarantee which includes both inspection and repair service during a specified period, the proportion of such equipment to the total equipment may indicate that neither maintenance contracts nor company-operated service is necessary. In such cases, vendors are requested to furnish repair service only when required. Such an arrangement is the least desirable of the three, for it has the following disadvantages:

a. Service calls on this basis cost more per call than under the contract arrangement.
b. Mechanical equipment usually does not receive the same careful attention under this service as it does under either of the two services mentioned previously. The useful life of the equipment is shortened.
c. Service is not always available immediately; thus, time is lost unless stand-by equipment is available.

When planning for the maintenance of office equipment, the inclusion of office furniture must not be overlooked. Periodic inspection and cleaning are just as important to desks, chairs, and filing equipment as they are to office machines. If company-operated service is in use, this equipment can be scheduled for attention as readily as can machines. Contract service is also available and, for a fixed fee, a contractor will wash, polish, and make furniture repairs. File cabinets will be cleaned, the suspension slides repaired and oiled, and all drawers put in good working order. Such work need not be done as frequently as machine service—once a year is generally sufficient. However, too often it is ignored entirely and the full useful life of desks, chairs, and files is not achieved.

Types of equipment. We turn now to a more specific and detailed discussion of the important types of equipment and machinery found in representative business offices. Several points should be borne in mind in connection with this discussion. First, it is confined to statements regarding the types of machines, what they will do, and how they will do it. Second, for obvious reasons, manufacturers' names have been omitted in the text. Third, no attempt has been made to describe the mechanical operation and parts of any machine. Fourth, only information pertaining to equipment and appliances which are generally in common use in offices is given. Thus certain devices with which some readers may be familiar may not be mentioned. In other words, the purpose of the remainder of this chapter is to present a survey of what the field offers, rather than to be an encyclopedia of office appliances.

Desks. There are a number of standard types of desks commonly used in offices today. The clerical desk, as distinguished from the stenographic desk, is designed for employees whose jobs consist of writing, checking, and manual computations. Single-pedestal and double-pedestal models are available and the selection should be made on the basis of writing area required and the drawer space necessary for records, reference material and personal possessions of the employee.

dicate that excessive vibration causes typewriters to wear rapidly, resulting in uneven alignment of the typewritten material and causing piled letters. For this reason, a fixed-platform desk should be selected whenever work conditions warrant it, since it permits a minimum of vibration and noise. The drop-center desk ranks next in stability, with the secretarial model last. The decision between the two should be based upon the relative use of the typewriter, for the writing surface of the secretarial model is always free for papers and the change from clerical to typing work can be performed without moving the typewriter platform.

The executive desk is generally a double-pedestal desk, 60 or 66 inches by 36 inches. Combined with a table of matching size and design, it permits the executive to use either piece as a writing surface and to spread the necessary papers and reports on the other so as to have them readily accessible.

Functionalized desk. It will be noted that the foregoing discussion concerns itself with describing standard equipment available. It is the writer's opinion that none of the standard equipment mentioned is necessarily the correct solution to the problem of selecting the proper desk. The same thoughtful consideration should be given to selecting this equipment as is given to selecting a billing machine or a calculator. The work of the employee should be analyzed and the duties of the job, the operations to be performed, the equipment (pencils, pens, reference books, charts, and so forth) used, and any other pertinent factors should be noted. The arrangement of the materials should be planned and the proper desk selected to provide the most compact, best-organized work bench for the employee. It is the writer's belief that too much emphasis is laid upon the standardization of design, size, and color. Such standardization contributes nothing to providing each employee with the tools best designed to permit him to perform his work in the most efficient manner.

There have been several studies made in an attempt to produce desks that can be adapted to the requirements of an individual job in the office. Two of the best-known of these research projects were the Studebaker desk, so called because W. E. Tarr and C. I. Center, of the Studebaker Corporation, developed it for use in that company's offices, and A. H. Stricker's keypunch desk, which was developed at General Electric's Nela Park offices.[3] The Stude-

[3] See Stricker, A. H., *Seven Steps Toward Simplified Office Procedures,* McGraw-Hill Book Co., New York, 1943.

baker desk is an attempt to use interchangeable bases, tops, and desk drawer and typewriter units. After analyzing the requirements of the job, a desk is assembled for it, thus insuring that each employee is furnished with only those features which are needed. The size is controlled so that a minimum of floor space consistent with efficient operation is used. A. H. Stricker and his staff made detailed studies of the keypunch operation. With the facts thus obtained, a functional desk was designed, improved, and redesigned until the desired result was obtained. It is interesting to note that the object of these studies was to improve production, reduce errors, simplify the work habits of the operator, and increase the employee's comfort. The first experiments alone increased production by 12 per cent and reduced errors by approximately 18 per cent. These attempts at functionalizing office furniture, as well as others such as that of the New England Mutual Life Insurance Company,[4] indicate a healthy trend on the part of alert office executives. The time is not far distant when equipment will be planned for production in the office, as it now is in the factory.

Executive, clerical, and stenographic chairs. Four main types of chairs are in office use. The (1) straight-back chair and the (2) adjustable swivel chair with arms are the ones commonly used by executives. The (3) same general type as mentioned above, but without arms, is manufactured in a variety of forms. This type of chair is used principally for stenographic purposes. The (4) nonswivel type of armchair is usually placed for the visitor beside an executive's desk.

Authorities agree that there is a definite relationship between correct posture and seating facilities and the quality and quantity of work. As a result, attention to the type of chair best suited to each kind of work has increased considerably in recent years. Posture chairs especially designed for office workers are available and are used in a considerable number of offices. These chairs are designed for executives, clerical workers, and typists and operate on the principle of adjusting the chair to the individual user. Therefore, it is important that the initial adjustment of the chair be made carefully and properly and that prior to assigning the chair to another employee it be completely readjusted and fitted to the new user. Failure to do this results in the loss of any benefit from the posture chair. The use of poorly adjusted chairs may

prove more detrimental than the use of standard, non-posture models.

Files. Filing cabinets of all types may be secured in either wood or steel. The four-drawer vertical filing cabinet, of either kind of material, made to hold 8½ by 11 inch papers, is the standard and usual piece of filing equipment. Practically all equipment manufacturers, however, produce as standard models vertical files designed to hold papers or cards of sizes other than 8½ by 11 inches, ranging all the way from 3 by 5 to 11 by 17 inches. Where the nature of the business is such that customers frequently call at the office, counter-height files are often used to advantage. Such files, in reality, are three-drawer rather than four-drawer, thus making the total height convenient for counter purposes. Not only does the use of such files save space, but it is often possible to file right at the counter papers or other records needed for use in talking with the customer or caller, thus saving the time which it would be necessary to take to go to some other part of the office to secure the paper, to return to the counter, and, after finishing the business at hand, to return the paper to the file.

Visible record-keeping equipment. Visible record-keeping equipment is extensively used in offices. The fundamental principle upon which all such equipment works is the fact that, in one way or another, the name, title, or subject is made quickly visible. Visible equipment is of three general types: (1) the unit or panel type, in which the card or metal rack itself is removable; (2) the type which consists of a series of panels built horizontally into the outer unit so that, by pulling the panel out, the principal name or title is quickly found (the holder in which the card is kept may then be raised, so that the entire card is visible); and (3) the revolving-rack type, similar to the first one mentioned, but used chiefly in cases where it is necessary for a considerable number of persons to use the rack at the same time. Credit cards used in retail stores, showing the names of customers who have a charge account, and the credit limit of each, are often placed on revolving racks of this kind. Each rack contains cards covering a section of the alphabet. In cases where the customer is waiting to take a package with him, the sales check is sent by tube to the credit clerk, who can quickly check the credit by turning to the rack, authorize the charge, and return the sales check to the sales clerk.

Limitations of visible equipment. Visible filing equipment has certain principal limitations. (1) In some cases visible filing equip-

ment is used for cards containing information that it is not necessary to refer to constantly or quickly. This type of equipment is somewhat more expensive than vertical filing units. Hence, when one considers the number of cards that one unit will hold, it is apparent that unnecessarily high costs may be incurred by using visible equipment when non-visible equipment would serve the purpose equally well. (2) In an office where record-keeping equipment needs are growing rather rapidly, the installation of visible equipment may result in a rise in equipment costs which will become increasingly disproportionate in relation to the filing space that is appropriated as more units are added. (3) Ordinary vertical file cabinets are often used for the storage of miscellaneous booklets, leaflets, reports, and so on, as well as for filing papers and letters in the regular way. Obviously, visible equipment is not adaptable to storage filing of this character.

Steel versus wooden equipment. Since the introduction of steel filing cabinets, there has been a considerable increase in the amount of steel office equipment used. Steel files are now used almost exclusively in preference to wood. It is possible to equip an office entirely with steel equipment including desks, tables, filing cabinets, partitions, bookcases, and chairs, the latter available in both steel and aluminum. Many companies that formerly produced only wooden equipment have added steel to their line, while a number of other companies produce steel equipment exclusively.

Among the advantages that steel equipment offers, under practical working conditions, are the following:

1. Steel resists fire much more readily than wood. It will not burn, nor will it fall apart if dropped from one floor to another.

2. Steel equipment costs about the same as wood, but lasts indefinitely, thus reducing the amount of depreciation which it is necessary to charge off each year.

3. Because steel parts wear out more slowly than wood, and, in general, stand the wear and tear better, the mechanism of a steel cabinet is less likely to get out of order.

4. In a good many cases which have come under observation, the bottom drawer of the filing cabinet is often used by the file clerk as a step to enable her to reach something on the top and at the back of the cabinet. Steel stands this practical kind of wear and tear better than wood.

Wooden files have one important advantage over steel files. In a burning building, the wooden exterior of the file cabinet may burn

somewhat, but the papers inside will not be charred so quickly as they are likely to be in steel cabinets. This is due to the fact that wood burns slowly and does not transmit heat, while steel, although it does not burn, is a conductor of heat, with the result that, under similar circumstances, papers may be charred more quickly in a steel cabinet than in a wooden one.

Adding and calculating machines. This group includes those machines whose sole work consists of calculating of one kind or another. The operations possible are addition, subtraction, multiplication, and division. Some types of machines are capable of performing all four operations; others, only one or two of them. Listing machines furnish a printed record of the calculation; nonlisting machines do not. Some operate mechanically when the keys are depressed; others are equipped with hand levers which register each item in the computation; still others are electrically operated and will perform an entire multiplication or division once the necessary factors have been set up. There are at least twenty different manufacturers of adding and calculating machines, many of them offering several basic types with various models in each.

Billing and bookkeeping machines. Billing and bookkeeping machines are not unlike, in that they are really a combination of a typewriter and a calculating machine. In fact, a number of machines which are sold for billing work and also as bookkeeping machines can be used, with slight changes, for both billing and bookkeeping work. The main purpose of the billing operation is to produce an invoice and simultaneously make additional copies for other purposes, such as the packing slip, the shipping copy, the manufacturing department copy, the express receipt, and so on. The fundamental principle of bookkeeping machine operation is also the writing of a number of records or forms at once, thus eliminating the copying necessary with hand work and also insuring accuracy of posting through mechanical calculation and devices that lock the machine when an error has been made. In these cases, such copies as the accounts receivable ledger, customer's statement, and a proof journal would be obtainable. Basically, both machines are a combination of a typewriter and a calculating machine, although there are some billing machines which merely type, others which type, add, and subtract, and still others which type, add, subtract, and divide. In the case of both billing and bookkeeping machines, the selection of the proper model will de-

83 cents. Other machines are available which will separate mixed change, which will count coins and wrap them the proper number to each denomination, and which will separate, count, and wrap, all in one operation.

Check-handling machines. There are a number of machines available for the production and processing of checks. Checks may be written by typewriter; they may be produced on certain billing and bookkeeping machines, when these machines are applied to accounts payable work; or certain portions of the check may be handled by means of addressing equipment. In addition to this, certain features such as the writing and protection of the amount of the check can be handled on machines specifically designed for this purpose. These machines imprint and perforate the amount upon the check, thus protecting the check against subsequent change in amount. These same machines will also affix signatures to the checks, protecting these signatures in the same manner. In some instances where the routines make it necessary, these signatures may be added as an operation separate from the writing of the amount. Some of the above equipment will not only write the check as indicated, but also produce a check register at the same time.

In certain offices the volume of checks arriving from customers is so great that the normal handwritten or rubber stamp endorsement proves to be a burdensome process. In such cases, the use of a check-endorsing machine is helpful. These machines automatically imprint the proper endorsement on the reverse side of the check and protect these endorsements simultaneously.

Dictating and recording machines. There have been a large number of improvements in the field of dictating and recording equipment within the last ten years. The standard dictating machine with the wax cylinder has been improved and, in addition, new types of equipment have become available. The wax cylinder system consists of three separate machines: the dictating machine, the transcribing machine, and the shaver (which is necessary to clean the surface of the record). The success of this type of dictating equipment has led to the development of a number of other types, the most important of which are the machines that utilize the principle of electronic recording on wire and those which record on flat disks rather than on cylinders. A number of models of the former type have appeared lately and include the benefits of clearer reproduction and the elimination of the shaving operation.

There are 9 basic reproduction problems common to offices:

A—Reproduction of the Primary Copy (without halftones).
(Record forms, reports, charts, checks, letterheads, bulletinheads, advertising literature, envelopes, tags, and labels.)

B—Reproduction of the Text or Message (without halftones).
(Form letters, bulletins, letters, and memo's.)

C—Reproduction of the Primary Copy and/or Text Requiring Halftones.
(Bulletins and advertising literature with halftone illustrations.)

D—Fill in of variable data on sheets of the same kind of Primary Copies.
(Fill in by longhand, writing machine or duplicating machine.)

E—Fill in of variable data on different kinds or sizes of Primary Copies.
(Fill in by longhand, writing machine or duplicating machine.)

F—Transfer posting of an individual line from a master list to individual sheets.
(Each line of a journal sheet is transferred to separate ledger sheets.)

G—Insertion of repetitive data on separate individual sheets of Primary Copies.
(Inserting or imprinting a name, address, number, date, size, etc. on individual sheets.)

H—Inserting or imprinting facsimile signatures.

I—Imprinting agent's name and address on Advertising Literature.
(Imprint for sales office, branch, dealer, distributor, etc.)

There are 9 possible combinations of the above:

J—Reproduction of "A" and "B" at the same time.

K—Reproduction of "A" and fill in of "D" at the same time.
(Requires preprinted hectograph master, die impressed stencil, or direct process offset plate.)

L—Reproduction of "A" and the insertion of "G" at same operation.

M—Reproduction of "A" or "C" and the imprinting of "I" at the same time.

N—Reproduction of "A", fill in of "D" and insertion of "G" at the same time.

O—Reproduction of "B" and the insertion of "G" at the same time.

P—Reproduction of "B" and the imprinting of "H" at the same time.

Q—Reproduction of "B", insertion of "G" and imprinting "H" at the same time.

R—Fill in of "D" and imprinting "H" at the same time.

There are 10 basic reproduction processes:

1. Carbon Paper
2. Automatic Typewriter
3. Hectograph Duplicator
4. Stencil Duplicator

5. Relief Printing
6. Offset, Planography
7. Photography (Camera)
8. Contact Print
9. Impression Stamp
10. Addressing Machine

Note: Check protector, postage meter, tabulating machines, facsimile equipment—and other processes such as oil paper stencils, silk screen, engraving, embossing, stone lithography, pen ruling, and the various high-speed presses which are uncommon in an office—are disregarded here.

Each of the ten basic processes has several variations that multiply the possibilities for solving reproduction problems. In fact there are so many possibilities that anyone unfamiliar with all the ramifications of reproduction becomes confused; therefore, this analysis has been developed as a measuring stick to help solve reproduction problems the most practical way.

To control reproduction so that advantage can be taken of minimum costs, improved quality, standard sizes, increased production and to expedite service, all reproduction requests should clear through one central point, and be handled by individuals thoroughly familiar with all the possibilities, characteristics, limitations and comparative quantity production costs of all processes available within the organization.

In most cases a problem can be solved by two or more processes, and usually the deciding factors are: (1) quantity required; (2) quality of copy required; (3) master available; (4) design of the copy; (5) layout cost for preparing master, stencil plate or typesetting; (6) combination runs (two or more up or front and back on the same plate); (7) equipment limitations such as (a) thickness of paper or card stock, (b) minimum and maximum sheet size, (c) maximum printing area, (d) style type, and (e) gripper or margins required; (8) time element or urgency for completing the job; (9) preservation of master, stencil plate or type for reruns; (10) over-all cost of the finished job (your cost compared to outside prices).

How to use the Reproduction Guide:

1. Ascertain the code letter, that applies to the reproduction problem or job, from the top of the guide—either one of the Basic letters, A to I, or one of the Combinations, J to R.
2. Determine the quantity of copies required.
3. Refer to the proper code letter opposite arrow and also to the quantity of copies required. Then refer downward simultaneously in both code letter and quantity columns until you come to a horizontal bar in the quantity column which also has an X to its left in the code letter column. These points reveal the various processes applicable to the particular problem or job.

Example:

1. We wish to reproduce a text or message without halftones. This is Basic Reproduction Problem B.
2. We need 1000 copies.
3. Opposite arrow, we find code letter "B" and under "Practical Run—Quantity Copies" we find quantity "1M." Referring downward under both "B" and "1M," the first method we come to is Stencil Duplicating with stencil prepared individually, while six other methods are also indicated.

Note: "O" in chart indicates that a process can be applied but should be used only in exceptional cases.

Description of the 10 Reproduction Processes

1. *Carbon paper.* There are two basic types of carbon paper, one made for writing longhand with pencil, the other for use with typewriter or other writing machines. (Hectograph carbon paper is covered in Section 3.) Both types are available in sheets or rolls, four weights of tissues, with three carbon finishes, and in five colors. It can be had with carbon coated on one side or both.

Spot carbon or strip carbon placed at any location on the back of a form or on a separate carbon sheet permits reproduction of the copy at that location and deletes the copy on the balance of the form. Inexpensive carbon paper, known as "onetime carbon paper" is commonly used in unit blocked, snap out, and continuous forms in sets.

Factors to consider when making a quantity of legible machine copies are: the weight of the carbon tissue, the intensity of the carbon, the weight of the paper stock, the kind of machine, the degree of hardness of the platen, and the touch of the operator.

2. *Automatic typewriter.* An automatic typewriter reproduces individually typewritten form letters or letters made up of form paragraphs, mechanically from a pneumatically operated perforated record roll. The operator manually types the individual name, address, and salutation and the body of the letter is typed mechanically, stopping at predetermined points for insertion of fill-ins, such as names, balances,

REPRODUCTION GUIDE

REPRODUCTION IS THE DUPLICATION OF ONE OR MORE COPIES OF AN ORIGINAL

BASIC REPRODUCTION PROBLEMS

A - REPRODUCTION OF THE PRIMARY COPY (WITHOUT HALFTONES) - Record forms, reports, charts, letterheads, bulletin heads, advertising literature, etc.
B - REPRODUCTION OF THE TEXT OR MESSAGE (WITHOUT HALFTONES) - Form letters, bulletins, letters, and memo's.
C - REPRODUCTION OF THE PRIMARY COPY AND/OR TEXT REQUIRING HALFTONES - Bulletins and advertising literature with halftone illustrations.
D - FILL IN OF VARIABLE DATA ON SHEETS OF THE SAME KIND OF PRIMARY COPIES - Fill in by longhand, writing, duplicating or addressing machine.
E - FILL IN OF VARIABLE DATA ON DIFFERENT KINDS OR SIZES OF PRIMARY COPIES - Fill in by longhand, writing machine or duplicating machine.
F - TRANSFER POSTING OF AN INDIVIDUAL LINE FROM A MASTER LIST TO INDIVIDUAL SHEETS - Each line of a journal sheet is transferred to separate sheets.
G - INSERTION OF REPETITIVE DATA ON SEPARATE INDIVIDUAL SHEETS OF PRIMARY COPIES - Imprinting a name, number, size, etc. on individual sheets.
H - INSERTING OR IMPRINTING FACSIMILE SIGNATURES.
I - IMPRINTING AGENT'S NAME AND ADDRESS ON ADVERTISING LITERATURE - Imprint for sales office, branch, dealer, distributor, etc.

COMBINATIONS OF THE ABOVE

J - REPRODUCTION OF "A" AND "B" AT THE SAME TIME.
K - REPRODUCTION OF "A" AND FILL IN OF "D" AT THE SAME TIME - Requires preprinted hectograph master, die impressed stencil, or direct offset plate.
L - REPRODUCTION OF "A" AND THE INSERTION OF "G" AT THE SAME TIME.
M - REPRODUCTION OF "A" OR "C" AND THE IMPRINTING OF "I" AT THE SAME TIME.
N - REPRODUCTION OF "A", FILL IN OF "D", AND INSERTION OF "G" AT THE SAME TIME.
O - REPRODUCTION OF "B" AND THE INSERTION OF "G" AT THE SAME TIME.
P - REPRODUCTION OF "B" AND IMPRINTING OF "H" AT THE SAME TIME.
Q - REPRODUCTION OF "B", INSERTION OF "G", AND IMPRINTING "H" AT THE SAME TIME.
R - FILL IN OF "D" AND IMPRINTING "H" AT THE SAME TIME.

LEGEND

X - INDICATES THE MOST PRACTICAL PROCESSES APPLICABLE TO THE SPECIFIC PROBLEM
O - INDICATES POSSIBLE PROCESS APPLICATION USED ONLY IN REMOTE CASES

INDEX	REPRODUCTION PROCESSES			REPRODUCTION PROBLEMS: BASIC A	B	C	D	E	F	G	H	I	COMBINATION J	K	L	M	N	O	P	Q	R	PRACTICAL RUN-QUANTITY COPIES (APPROXIMATE)
1	CARBON PAPER	PENCIL - LONGHAND			X		X	X	X														
		NOISELESS TYPEWRITER			X		X																
		STANDARD TYPEWRITER			X		X	X															
		ELECTRIC TYPEWRITER			X		X	X															
		ACCOUNTING OR BOOKKEEPING MACHINE					X	X	X														
		ADDRESSING MACHINE					X																
2	AUTOMATIC TYPEWRITER	PARAGRAPH SELECTION			X			X															
		COMPLETE LETTERS			X		X																
3	HECTOGRAPH DUPLICATING	GELATIN	MASTER PREPARED INDIVIDUALLY	USING PENCIL, INK OR TYPEWRITER RIBBON	X	X		X	X											X			
				USING HECTOGRAPH CARBON PAPER	X	X		O	O											X			
			PREPRINTED MASTER		O									O	X								
		SPIRIT (DIRECT FLUID)	MASTER PREPARED INDIVIDUALLY		X	X		X	X											X			
			PREPRINTED MASTER		O									O	X								

4	STENCIL DUPLICATING	STENCIL PREPARED INDIVIDUALLY		X	X		O	O					X					X		
		IMAGE DIE IMPRESSED IN THE STENCIL		O									X	X				O		
		PHOTO CHEMICAL PREPARED STENCIL		X									X							
5	RELIEF DUPLICATING OR PRINTING	ROTARY DUPLICATOR	TYPE SET OR LINE SLUGS	X	X						X	X	X					X		
			RUBBER OR METAL PLATES	X		O						O	O			X		O		
		FLAT BED DUPLICATOR			X		X	X											X	
		FLAT BED DUPLICATOR AND ADDRESSER			O												X	X	X	
		SIGNATURE IMPRINTING MACHINES									X									X
		FLAT BED LETTER PRESS	TYPE SET OR LINE SLUGS	X	X							X	X					X		
			RUBBER METAL PLATES	X		X						O	O			X		O		
		FLAT BED PROOF PRESS		X	X								X			O				
6	OFFSET DUPLICATING (PHOTO LITHOGRAPHY) (PLANOGRAPH)	DIRECT PROCESS PLATE	PLATE PREPARED INDIVIDUALLY	X	X													X		
			IMAGE PREPRINTED ON PLATE	O									X	X						
		PHOTO PROCESS PLATE	FROM OPAQUE STENCIL PREPARED INDIVIDUALLY	X	X													X		
			OPAQUE STENCIL SPLICED TO PHOTO NEGATIVE			X							X					X		
			FROM PHOTO NEGATIVE	X	X	X							X			X		X		
		FLAT BED OFFSET PROOF PRESS		X	O								X					X		
7	PHOTOGRAPHY (USING CAMERA)	PHOTOGRAPH - EXISTING COPY		X		X							X							
		PHOTOCOPY - EXISTING COPY		X	X	O							X							
		MICROFILM - EXISTING COPY		X	X								X							
8	CONTACT PRINTS	WET OR DRY PROCESS	EXISTING ORIGINAL	X	X	O							X							
			ORIGINAL PREPARED INDIVIDUALLY	X	X								O							
			PREPRINTED TRANSPARENT MASTER	X									X	X						
9	IMPRESSION STAMPS - RUBBER OR METAL			X	X		X	O		X	X	O					X			
10	ADDRESSING MACHINE	EMBOSSED METAL PLATE					X			X	X				X		X			X
		CUT FIBRE STENCIL					X			X	X				X		X			
		POSTAL CARD PRINTER AND ADDRESSER		X	X					X								X		

Fig. 15 (*Cont.*).

as the original report or used a second time to make a maximum of two legible transfer postings of each line.

4. *Stencil duplicating.* Stencils are made of a tough fibrous tissue having a texture impervious to ink. The image to be reproduced is cut into the stencil by typewriter or stylus. The cut stencil is placed around the drum of the machine and the pressure on contact with the paper forces the ink from the drum inkpad through the cut stencil to reproduce the image. Stencils for line work, drawing or hand-lettering are prepared on a drawing scope, and a stylus is used for cutting the image into the stencil. Several types of styli are available for different breadth of lines or for dash or dotted lines. Metal and plastic screened plates are used for shading. Lettering guides are used for hand-lettering. A transparent cellulose ribbon, wound on a typewriter ribbon spool, is often used as it eliminates cutting out of interiors of letters and helps keep the type clean.

Photographic or die-impressed inserts of illustrations and cartoons can be stripped in with the regular typewritten copy. The die-impressed copy can be a form, letterhead, or bulletinhead and the text is inserted by longhand or typewriter so that the form and the fill-in or text can be reproduced simultaneously. Water soluble ink produces quality work on regular sulphite stock, eliminating the necessity for special porous stock. Offset on the back of the copy can be eliminated by using an inter-layer for slip sheeting.

Some of the outstanding advantages of this process are that copies are made direct from the stencil; any portion of the image can be deleted by masking out; two or more colors can be reproduced at the same time by separating colors on the ink pad; illustration inserts can be stripped in with typed copy; fill-in can be made on die-impressed stencils and both reproduced at the same time; and stencils can be cleaned and preserved for reruns.

5. *Relief duplicating and printing.* Relief printing is the means for reproducing copies from type or plates on which the image is raised. There are six types of machines designed for this purpose:

(a) Rotary duplicator. Hand set type, line slugs, embossed metal strips, rubber plates or curved electrotype plates are mounted on a drum segment and reproduction can be made by using either printing ink or inked ribbon.

The rotary duplicator can be used for other miscellaneous operations, such as imprinting, perforating, scoring, signature imprint, and consecutive numbering. Some of these operations can be performed at the same time the copy is being reproduced, while others require a separate run.

(b) Flat-bed duplicator. One or more embossed metal plates of five to seven lines per plate are assembled into a frame to compose the master record for imprinting. The frames holding the embossed plates are laid on the printing bed of the machine and the required number of imprints are reproduced through a ribbon. The application of this

the image is offset onto the paper. Reproduction can be made on all weights and types of paper and card stock. The master or plate can be prepared by typewriter, tracing through carbon, handwriting, shadow tracing, drawing, pressure transfer, painting, mechanical transfer, opaque stencil transfer, ruling, and photography.

Three different mediums can be used for preparing offset plates. Each has advantages particularly suited to certain classes of work. They are:

(a) Direct image. The image is applied directly to the smooth coated surface of a paper, plastic or metal plate. Only materials having an oil base and especially designed for applying images direct to the plate will reproduce. Some of the outstanding advantages of this process are that copies are made direct from the original writing, typing, painting or drawings, and that fill-in can be made on preprinted plates and both reproduced at the same time.

(b) Opaque stencil transfer. Opaque stencils are made of a tough fibrous paper which is photographically opaque. The image to be reproduced is cut into the stencil by a typewriter or stylus. The cut stencil becomes the medium for transferring the image onto the offset plate by passing bright arc light through the image apertures which affect the sensitized zinc or plastic offset plate.

An opaque stencil can be spliced to a photographic negative of a letterhead or bulletinhead so that both appear on the offset plate. This permits running the complete job in one operation. Photographic negatives of line illustrations or halftones of pictures may be stripped into a typewritten stencil. Some of the advantages of this process are that clear-cut copy can be reproduced from typewriter type or drawings; typewritten text can be spliced to photographic negative and both reproduced at the same time; and halftone negative or line illustrations can be stripped to a typewritten stencil and both reproduced simultaneously.

(c) Photography transfer. Any image that can be photographed (line work or halftone) will reproduce by this method. The photographic negative becomes the medium for transferring the image onto the offset plate by passing bright arc light through the transparent image which affects the sensitized offset plate.

Means for preparing the master are unlimited. It can be an existing copy or it may be originated to requirements. The existing copy, such as letters, books, advertisements, photographs, drawings, maps, forms, magazine or newspaper articles, can be reproduced by photographing the original, either in the same size or enlarged or reduced. Line drawings and record forms, prepared on a good quality white drawing stock by means of a ruling pen and india ink will photograph well. Typewritten composition can be typed directly on the master or can be cut and pasted in place. Some of the advantages of this process are that any copy that can be photographed can be reproduced in the same size or enlarged or reduced; only one master is required for printing two or more up on a plate; halftones can be reproduced; shading effects and block outs can be used effectively; longhand writing can be reproduced; the plate can be

be backed up with carbon paper in reverse on the under side to improve opacity.

In general, there are two types of contact prints: wet process and dry process.

(a) Wet process. After exposure, the copy must be developed, washed, and dried. A negative print is reproduced from a positive original or a positive print is reproduced from a negative original.

(1) Blueprint. Blueprint equipment is available to make copies on continuous rolls or on cut sheets. Continuous roll equipment completes the entire process automatically. It exposes to the arc light, develops with potash, washes with water, and dries the print. These operations are handled individually when cut sheets are used.

(2) Van Dyke print. The equipment and process is much the same except that the Van Dyke paper is developed with hypo and the results are dark brown and white rather than blue and white.

(3) Contact printer. This process is similar to the blueprint and Van Dyke processes except that cut sheets are exposed to light in an inexpensive box printer and the special sensitized paper is developed and fixed. The results are black and white. Copies can readily be made from existing materials, such as letters, graphs, charts, and advertising, or from transparent originals.

(b) Dry process. Positive prints are reproduced directly from transparent originals by dry developing processes. The sensitized paper and the transparent original are exposed in the printer, then the exposed paper is fed through the developing machine, and the finished print emerges fully developed for use without washing or drying.

Since the backgrounds of these prints are white, added written notations or revisions are legible, and prints can be colored with crayon, ink, or water colors. Black and white prints are available with a jet black, red, or brown line on a white background. The prints are developed by the application of moisture to the surface of the sensitized paper. The so-called white print (ozalid) process produces blue, black, or maroon lines on a white background. In this case, the prints are developed by ammonia fumes. This dry process reproduces true to the scale of the original and prints do not wrinkle or curl.

9. *Impression stamps.* Impression stamps are ideal for inserting repetitive data on record forms and there are many variations designed to meet specific problems.

(a) Rubber stamps. These are made in such stock designs as "PAID," "BILLED," etc., and other rubber stamps can be made to order in any size or style to meet specific problems. There are other models which use interchangeable type which is either set in grooves or the characters appear on an endless rubber belt.

Ink for such stamps can be obtained in a number of colors, including purple hectograph, which is used for reproducing the impression by the gelatin hectograph process.

(b) Signature stamps. Facsimile signature stamps can be conveniently used for approvals when longhand signature is not required. They are

legibility. The machine which was developed to type in variable type faces has gained wide acceptance because of its versatility. Both horizontal and vertical spacing of lines and letters may be varied to fit the work. This machine can be used for special reports, where condensation is important and where varied sizes of type will enhance the readability. It is also widely used as a composing machine, since it can be used to create photo-offset copy, cut stencils, and prepare direct process photo-offset masters.

Other available office machines and appliances. In the foregoing discussion, the principal kinds of office machines and appliances have been described briefly and non-technically, and some of their chief uses and applications have been indicated. Yet there are numerous additional machines and appliances used in business offices, of which no mention at all has been made. Among the more important of these are:

1. Autographic registers and manifolders.
2. Loose-leaf equipment.
3. Envelope moisteners
4. Folding machines.
5. Paper-cutting, punching, and perforating machines.
6. Telephone indexes.
7. Envelope openers.
8. Hand stamp affixers.
9. Sealing machines.
10. Combined sealing and stamping machines.
11. Metering-permit machines.
12. Non-metering-permit machines.
13. Postal scales.

Earlier in this chapter mention was made of the Office Machines Directory of the National Office Management Association. The following list of machines and trade names was taken from that directory.[6]

MACHINES AND TRADE NAMES

Adding and Calculating:	*Adding and Calculating:*
Addometer	Calculagraph
R. C. Allen	Comptometer
Allen Wales	Corona
Automatic	Dalton
Barrett	Friden
Burroughs	Gem

[6] Office Machines Directory, NOMA *Bulletin* No. 3, National Research Committee, National Office Management Association, Philadelphia, 1946.

Adding and Calculating:

Marchant
Monroe
National
Remington Rand
Sundstrand
Underwood
Victor

Addressing:

Addressograph
Elliott
Multistamp
Tag-O-Graph

Billing and Bookkeeping:

Addressograph
Burroughs
Elliott Fisher
I. B. M.
Monroe
National
Remington Rand
Sundstrand
Underwood

Check Signing:

Addressograph
Chexsigno
Cummins
Elliott
International
Monroe
Multigraph
National
Protectograph
Protex
Signagraph
Sign-O-Meter

Check Writing:

Addressograph
Burroughs
Elliott
F & E
Monroe
National
Paymaster
Protectograph
Safeguard
Speedrite

Duplicating:

(See *Reproduction*)

Folding:

Baum
Cleveland
Davidson
Dexter
Hustler
Inserting and Sealing
Multigraph

Hectographing:

(See *Reproduction-Hectograph*)

Inserting:

Inserting and Sealing

Lithographic:

(See *Reproduction-Planographic*)

Mail Handling, Metering and Sealing:

International
Labelors
Lightning
Mail-O-Meter
Multipost
National
Pitney-Bowes
Standard
Standard-Johnson
Super Envelope Moisteners
U. S. Postal Meter

Microfilming:

(See *Reproduction-Microfilm*)

Perforating & Canceling:

Cummins
National

Punched-Card:

I. B. M.
Keysort
Remington Rand

Reproduction-Contact-Blue Print and White Print:

Bluestreak
Bruning
Dietzgen
Ozalid
Paragon
Pease
Revolute
Shaw
Wickes

Reproduction-Contact-Photocopy:

Apeco
Copyflex
Duophoto
Electro-Copyist
Exact-Photo-Copy
Monotype-Huebner
Pease Di Flex
Photo Print
Portagraph
Revolute
Trucopyphote

Reproduction-Hectograph-Gelatin:

Ditto
Gel-Sten
Redigraph
Speedograph
Victo-Graph
Vivid

Reproduction-Hectograph-Spirit

Copy-Rite
Ditto
Rex-O-Graph
Speedliner
Speedograph
Standard
Victo-Graph

Reproduction-Microfilm:

Film-a-record
Flofilm
Graphic

7

Organization and Work of the Filing Department

Filing department a service unit. Mention has been made in a previous chapter of the fact that the office is a service department to the business departments, and that the office manager is primarily a service executive. The organization and work of the filing department illustrates this situation especially well. No matter what duty of the filing department one may be considering, an analysis of the work and the need for it will quickly show that the ultimate object is an arrangement whereby the needs of some one of the business departments may be better served. Service, therefore, is the cornerstone upon which all of the activities of the filing department are built.

Duties of filing department. Under an arrangement of centralized filing, one of the principal duties of the filing department is to act as the final coördinator of information secured through, and handled by, the other departments. Often, this is done by bringing together in one folder or binder all correspondence and papers relating to the company's transactions with a particular concern or to a particular subject. In its capacity of coördinator, the filing department may be called upon to perform functions usually assumed by the business library, the research department, or even the statistical department, in a larger company. In so doing, it gathers and stores material regarding matters outside the company's own business. An oil company, for example, has a direct interest in having constantly and readily available a large amount of information with reference to conditions in oil fields, statistics of consumption, development of new lands, and so on. At the same time it places in its file all correspondence and records relating to its own business. In this case the filing department is acting in the dual capacity of a library and a keeper of company records.

The preservation of all records sent to it, both active and inactive,

is also a duty of the filing department. Moreover, the records must be made readily available at all times. The most important function of the filing department is not filing—*it is finding.* Files are not wastebaskets, nor are they places to put papers with the thought of never seeing them again. The proper performance of the filing function assumes not only the existence of an effective method of control, but also the installation and use of types of filing systems suitable to the work. The advantage of centralizing the filing function and the various types of filing systems in use are discussed in subsequent sections.

Filing departments also render tickler or follow-up service to the various business departments. It often happens, for example, that an executive wants to have a certain letter drawn to his attention at a specified date in the future. It is the duty of the filing department to see that this letter comes to him at the proper time. The methods by which this may be accomplished also are considered below.

which are and should be kept in private or departmental offices rather than in a centralized filing department. On the other hand, it is also true that in many cases papers which a young or egotistical junior executive may like to regard as highly important and confidential are, as a matter of fact, simply part of the routine business of the company and, consequently, belong in the general files rather than in his private office files. It should never be forgotten that all papers handled by any company employee, whether he be the chief executive or the office boy, belong to the company and not to the individual.

Advantages of centralization. Centralization of the files in one department yields a number of outstanding advantages which no departmental arrangement can possibly bring about.

In the first place, centralization results in the concentration of trained employees. Instead of a miscellaneous group of stenographers, clerks, and junior executives doing the filing or going to the files occasionally for papers, only people with specialized training and experience do the filing. As a result the filing is better done.

Centralization of the files also results in a uniform system of indexing and filing. Uniform service for all departments in such matters as the attaching of previous correspondence to incoming mail, follow-up, and transfer are also secured under a centralized plan. Since correspondents, senior clerks, and executives may be transferred from one department to another, uniformity in service of this kind is extremely helpful.

Centralized filing relieves other employees of this work. Provided, of course, that papers can be quickly and readily obtained from the centralized files whenever they are wanted, employees welcome the shifting of this responsibility. The ability to place responsibility definitely at one source is one of the outstanding advantages of centralized filing.

Many instances might be given to prove that centralization is of distinct money value in the saving of equipment. Where each department maintains its own files, the natural tendency, and in fact the actual necessity, is to provide a liberal amount of filing space. A department, for example, may have sufficient material to fill six file drawers. Filing cabinets are, however, usually purchased in units of four drawers to the cabinet. Thus one must have, under a departmental plan, eight drawers available in order to obtain the use of six. Duplication of guide cards and folders is also a necessary part of a departmental arrangement. A reduc-

from the filing department to the business departments is set up, through either the establishment of an efficient messenger service or the installation of mechanical conveyors, such as tubes or overhead carriers, then papers can be obtained from the filing department without any appreciable loss of time. If, however, the company is not willing to spend the necessary money and effort to provide such a system, then centralization inevitably will lead to great inconvenience on the part of department heads.

A second claimed disadvantage of centralizing the filing function arises from the fact that the various business departments each have different needs. It is said, for example, that the credit department will want its correspondence kept alphabetically according to customers' names, whereas the sales department may wish to have a cross index of customers and prospects by salesmen or by territories. This objection may be largely overcome by the installation of a proper filing system. It is true that the needs of the various departments differ, but it is also true that competent and experienced people are readily available who can work out a system which will fit the needs of the various departments and yet permit centralization of the filing function.

Centralization not practicable in all cases. Despite the fact that certain claimed disadvantages of centralization can be overcome by the installation of an efficient messenger or conveyor service and by the use of a filing system which meets the specific needs of the company, there remain certain cases in which centralization is impracticable. In the first place, there are the correspondence and other papers of important executives. Much of this material is clearly confidential and should remain in departmental or executive files. Many of the records and reports of the financial and accounting departments are necessarily filed in these departments and should not go to a central filing department. Because of the nature of its work and contacts, it is unusual to find any of the correspondence and records of the purchasing department in the central files. Engineering data in most cases are kept within the department itself. The legal department offers another illustration.

The important point to be borne in mind is that centralization of the filing function is a desirable and practicable arrangement in most organizations and for the majority of the departments, but that there are certain departments in every company and some business organizations in which a decentralized or departmental plan is much the better working system. This is a practical point

that is sometimes overlooked by those who see in centralization a panacea for all filing problems.

Centralized control—a compromise. When physical centralization is impracticable, centralized control frequently can improve the quality of filing service in all the departments and safeguard the entire organization's interest in the departmental files. Ida Welch explains it as follows: [1]

In many offices, large and small, the records and papers supporting them are under the direction of the person responsible for getting out a unit of the work. He, in turn, is responsible to another who also has a set of files. The latter is responsible to his superior who keeps his files, and so on up the line to the president.

All these files are working files, arranged in the manner most convenient to the people using them and, of course, in accordance with their individual ideas on filing.

These little files are successful from the individual's standpoint. The only trouble is, they are not company-minded, and getting at the records stored in them depends on the good-will of the party in charge. If that individual leaves his present job, he takes along in his head the key to his system, and transfers his files to storage where they become a time consuming problem.

The fact remains that more companies are using such individual files than are maintaining central filing departments. Therefore it would seem these files are fundamentally all right. Going on this presumption, let us look at central control to reduce expense and streamline the files.

Instead of tearing down the files now existing and reworking them into some new structure, let's see what happens if we keep the files as they are, impose a super-structure over them which will coordinate the systems, christen each section with a formal name, and eliminate duplications. Or, to put it differently, create a filing language easy to learn and agreeable to all concerned and use that language to keep a written record of the location and types of files within the company.

Actual control of the files is accomplished by listing all files in central control. General files can be listed and the file arrangement shown. Specific files are liable to give more trouble and should be listed individually.

The control may be a card index, giving file name and location, or it may be a typewritten list. It should be in charge of a competent, experienced file supervisor whose business will be to sell central control, give filing advice, and supervise the care of transferred records to central files and to dead storage.

Centralizing the files physically is optional, but at any rate after all filing is being done in a uniform way, there is no longer any reason for the individual to keep other than current matters.

[1] Welch, I., "Central Control to Cure Filing Troubles," *American Business*. August, 1945, p. 30.

Under such a plan, departmental file clerks are responsible to the file supervisor for the maintenance of filing standards. When one division has a heavy load or gets behind, the supervisor borrows a girl from a section where the work is lighter at the moment. Thus, the work keeps flowing and no department has the extra filing help which otherwise would almost surely be employed to care for peak loads.

The A. O. Smith Corporation, of Milwaukee, Wisconsin, has centralized control of transferred material under the Central Filing Department and is working toward complete central control of all filing, along the lines outlined above.

The general offices of The Babcock & Wilcox Company utilize a similar idea in several of their divisions. Subject files are set up in accordance with a master subject index and the Office Planning Section works out additional designations when necessary. The filing is performed within each department, division, and section, but under the guidance of a file supervisor and the Planning Section.

Routine of filing department operation. Assuming that the filing function is organized on a centralized basis, at least as far as such a plan is practicable, the following routine of filing department operation is typical.

1. When a letter is received in the filing department from the incoming-mail department, it is first time-stamped. A file clerk then reads enough of the letter to determine whether it will be necessary for the recipient to have the file containing the previous correspondence in order to answer the letter just received. If the previous correspondence is necessary, the folder is taken from the files, charged to the dictator to whom it is sent, and forwarded, together with the incoming letter, to the proper person.

2. After the reply has been dictated and transcribed and the original letter signed, the carbon copy, together with the original letter and the file holder, if it has accompanied the correspondence, is returned to the files. In many companies the dictator or his secretary indicates the name of the company, person, or subject under which the reply is to be filed. In this way letters addressed to one company but referring to business with another are insured proper filing. Similarly, in cases where two copies are made of a letter for the purpose of filing each under a different name, marking them in this way makes certain that they will be placed by the file clerk in the correct folders.

3. The carbon copies of outgoing letters, together with the original copies of incoming letters, are then sent to the head file clerk's desk for sorting and for stamping specific filing instructions to the file clerks. In this way the head file clerk not only is kept in constant touch with the papers passing in and out of her department, but any matters which deserve special comment or instructions are taken care of at the right time—before they get into the files.

4. After all returned papers have had the attention of the head file clerk or her immediate assistant, subordinates proceed to sort them for filing and refiling purposes. Old files are placed in a pile by themselves and the unfiled papers are sorted alphabetically, numerically, or by subject, as the case may be. When the volume of sorting work of this kind is large, a sorting device (sorting tray, flat sorter, or the like) applicable to the specific problem is recommended.

5. If index and cross-reference cards are used, they should be prepared before new material is finally put away. The preparation and use of indexes and cross-reference cards is discussed in a subsequent section.

6. The last step in the filing-department routine is the actual filing or putting away of the new material in the file folders. The almost universal custom is to place the letters in the folder so that the last date is on top, or, in cases where a numerical system is used, to place the letter so that the highest number is on top of the folder.

The charge-slip system. Mention was made in the previous section of the fact that when complete file folders or individual letters are removed from their place in the files, the person to whom they are sent is charged with them. The usual charge system consists, in the case of an entire folder, of inserting in the files in place of the folder an 8½ by 11 inch card of distinctive color which is prominently marked "Out" at the top. On the body of the card are columns for noting the date on which the folder was removed from the files, the person to whom it was charged, and the date on which the folder was returned. The same plan may be used in the case of individual letters, the only difference being that in this case a single sheet of paper rather than a card is substituted in the file folder in place of the letter which has been removed.

Too much emphasis cannot be laid on the importance of pro-

viding, in any filing system, for some such charge plan as has been outlined. One of the chief reasons why filing systems, both centralized and departmental, do not always yield the best results is that no systematic method is provided whereby a proper record may be kept of material removed from the files. It should be obvious that, just as soon as anyone in the organization is allowed free access to the files and no provision is made for charging material taken out, the system must fail sooner or later.

Methods of controlling papers. The charge-slip system just outlined provides one effective method for controlling papers in a centralized filing department. The establishment of a strict rule that no one but file clerks shall be admitted to the filing department, much less have access to the files themselves, is another practical means whereby the operations of the filing department may be made more effective. In some companies it is a rule that all papers must be returned to the files every night, even though they may be required again the next day. Many banks and stock brokerage houses keep daily records of all incoming and outgoing correspondence. This is a relatively expensive method of controlling papers, but it is sometimes warranted, particularly where large sums of money may depend on the contents of a single letter.

Checking the work of the filing department. The practice of having the head file clerk make a periodic spot check of the file folders to determine the accuracy of their contents has much to recommend it, not only from the standpoint of finding possible errors, but also because of its effect on those doing the actual filing.

As a matter of fact, there is no reason why the work of the filing department should not be audited in exactly the same way as that of any other department. In addition to periodic checks by the supervisors, office managers themselves, in a number of companies, make such inspections occasionally. For example, the office manager or the person making the file audit may list a hundred letters or other papers by name and date as they come across his desk during the ordinary day's work. At the time of the audit he may ask that these be secured from the files, or that a statement be made of who has them, if they are charged out of the file.

Another approach is to examine in detail a dozen or more folders picked at random from the files. In any case, the primary pur-

that the office manager and his file supervisor have against such accusations.

The office manager should also be interested in the efficiency of his filing section. By comparing the volume of work accomplished daily and the time consumed in the various operations with carefully established standards, he can determine a fair day's work for each employee and control his filing costs intelligently. The nature of filing work differs in every organization; therefore, standards must be set in each office individually. However, the following statistics, which were compiled by the Chicago Bureau of Filing and Indexing from a survey of manufacturing concerns, banks, insurance companies, and some government offices, can be useful as a check on individual established standards: [2]

1. To file cards in an alphabetical file	297 pieces per hr.
2. To mark 8½ × 11 letters for a name file and make the first A-Z sort	291 pieces per hr.
3. To sort and file letters in an alphabetical file	176 pieces per hr.
4. To file only papers in an alphabetical file	350 pieces per hr.
5. To find papers in an alphabetical file	94 pieces per hr.
6. To sort vouchers in a numeric file	512 pieces per hr.
7. To file vouchers in a numeric file	451 pieces per hr.
8. To file papers in a geographic file; state, town, and name	308 pieces per hr.
9. To file data by subject	147 pieces per hr.
10. To sort into a flat sorter	759 pieces per hr.

Types of filing systems. A competent file supervisor must be acquainted with the five basic systems of filing, which are alphabetical, numerical, subject, geographical, and chronological. Other filing systems are in use, but they are adaptations of these basic systems. Therefore, the file supervisor must be acquainted with the advantages and disadvantages of the major types so that she may evaluate a file system and judge its utility. It must always be borne in mind that no system is proof against errors made by careless, incompetent clerks, nor is any one system superior to all the others. A filing system must be selected for a particular need, and the fitness for the work in question is the practical test which must be met.

The alphabetical filing system. This system is the most direct, the oldest, and the most widely used today. Ninety per cent of

[2] *The Filing Bulletin*. Chicago Filing Association, June, 1944, p. 78.

all filing is alphabetical. It is a direct system because no index is required to locate material in the file. It uses alphabetical notations on guides, generally of heavy pressboard, on which the captions may be terminal, such as Aa—Ac, Ad—Ah, and so on; non-terminal, such as Aa, Ad, and so on; or inclusive, such as Aa Ab Ace Aco, Bab Bac Bad Bag, and so on. Advocates of the inclusive caption maintain that the combinations appearing on the guide are those met most frequently when material is filed and clerks and file clerks have to perform very little mental spelling. Filing becomes a matter of matching letter combinations. All of the above types of guide are supplied in alphabetical subdivisions ranging from 25 to 10,000 divisions. In many cases, special name guides are inserted to cover those names which appear very frequently within a file—for example, American, Consolidated, and United.

The primary advantage of the alphabetical system is its simplicity, which reduces the training necessary for file clerks who use it and enables those who may not be entirely familiar with the filing arrangement to find whatever they wish in cases of emergency. Its disadvantages lie in the fact that, as it grows, the alphabetical guides must be replaced by other sets which are more finely subdivided, thus increasing the difficulty of filing and possibility of misfiling correspondence. The former disadvantage can be overcome by making each file clerk responsible for a particular section of the entire file so that she may become more familiar with the organization of that section, thus decreasing the tendency to misfile.

The numerical filing system. The numerical system was popular in the early 1900's because alphabetical equipment had not been perfected at that time and because the opinion was held that, after the necessary coding, filing and finding could be accomplished by less efficient personnel. From the time of the development of improved alphabetical systems, the numerical system lost ground rapidly and is today used mainly by lawyers, architects, contractors, and engineers. Numerical filing is an indirect method of filing, since a cross-index must be maintained in order to find the filed material. A number is assigned to each correspondent, case, or project and the numbered folders are filed in numerical order. Miscellaneous material must be maintained in a separate alphabetical or subject file. The advantages of the numerical system are that material once coded may be filed faster than in an alphabetical file and that a numerical file can be expanded in-

definitely. The disadvantages are that the entire coding and filing process is about 50 per cent slower than straight alphabetical filing and thus more costly. There is no satisfactory provision within the system for the filing of miscellaneous material, and the opportunity for errors through a transposition of numbers is present. Such errors once made are difficult to trace. The numerical system is used mainly in files where the jobs, clients, or subjects each have a number that acts as an identification mark; for the filing of confidential records; for handling a rapidly growing file; and in files where there is extensive permanent cross-reference.

The subject filing system. The subject filing system is the most involved method of filing material, but at the same time it is the most useful filing system for handling certain types of material. A subject file is a source of data, statistics, and information that could not be filed in any other manner.

The installation of a subject file requires care because no filing system is more open to failure, none requires more safeguarding, and none can be more quickly wrecked by carelessness. It requires more experienced workers, it is slower work, and it is more costly. A study must be made of the various departments and the functions of each as well as of the type of material each department sends to the file and how it requests material from the file. Department heads and executives should be consulted regarding technical details. Subject headings must be carefully chosen so that synonyms may be eliminated and so that subjects can be specific, significant, and technically accurate. Dictators and secretaries should be encouraged to indicate the subject on each letter which is sent to the files, but this suggestion must not be regarded as authoritative. The final decision must rest with the file supervisor, who is responsible for maintaining uniformity of terms. An outline of subject file headings should be furnished the entire organization by the file department to guide them in their requests for information.

The geographical filing system. The geographical system is a direct method of filing and is used mainly by publishing houses, mail order houses, wholesalers, and various types of sales organizations. As in the case of alphabetical systems, equipment houses supply standard sets of guides which may consist of a set of state guides subdivided to the required degree by auxiliary sets of county and city guides. Individual folders are filed behind the proper city guide, and in those cases where but one or two papers

are filed each year for a given customer, miscellaneous city or miscellaneous state folders are used. Where the file is large enough, an auxiliary alphabetical set of guides and folders may be used to expand the file at any point where an unduly large amount of filed material collects.

The main advantage of a geographical file is that a desired review can be made of the activity in any given territory merely by removing the town, county, or state from the file. The disadvantages of the system are that there is an increase in labor cost inasmuch as geographical filing is roughly 33⅓ per cent slower than alphabetical; there is an increase in the possibility of errors; and the location as well as the name of filed material must be known, or else an auxiliary alphabetical index must be main-

tasteful task, because it adds to the burden of clerical work. It is important to recognize the fact, however, that the use of office space to store a considerable quantity of material which might as well or better be stored in less expensive quarters is much too wasteful and expensive a procedure to follow. Moreover, equipment used for filing active material is considerably more expensive than transfer cases, which are ordinarily used for inactive material and serve the purpose equally well.

The first step in transferring material from the active to the inactive files is to decide what material can be deemed active and what inactive. Naturally, the decision on this matter will depend not only on the kind of business in which the company is engaged, but also on the nature of the material itself. In a manufacturing business, for example, the unit of work is usually the customer's job or order. When the work has been completed on a particular order and the last shipment of the goods made and paid for, that transaction is usually completed and closed. In such cases all correspondence and papers relative to the order should be kept in the active files for, say, three months after receipt of payment. At the end of this time they may be removed. In the same company, however, receipted bills for purchases made will naturally be kept until after the legal time limit for bringing suit, as set forth in the statute of limitations, has expired. On the other hand, banks and brokerage houses are necessarily forced by the nature of their business and by government regulations to keep some of their documents for a considerable length of time, although this material does not remain indefinitely in the active files. Insurance companies necessarily preserve all papers in connection with every policy issued. This is done for their own self-protection, as well as in the interest of the policyholder. When one considers that many insurance companies have outstanding millions of individual policies, every one of which is of vital interest to a number of individuals, the importance of this matter, as well as the complexity of the whole problem of record-keeping, becomes more apparent.

Legal limitations. How long records and correspondence having to do with contractual relations should be kept depends, among other things, upon the several state laws covering the period during which suits may be brought. As any given state may have prescribed as many as eight different periods of limitation for civil actions, a complete listing of these periods is not given here. They

may be found in detail in the *Credit Manual of Commercial Laws*, 1939, or as reprinted in *The Disposition of Inactive Records*, published by the Policyholders Service Bureau of the Metropolitan Life Insurance Company, and in *Retention and Preservation of Records with Destruction Schedules*, published by the Chicago *Bureau of Filing and Indexing*, 1946.

The statutes of limitations, however, are not the only legal factor involved. Fraud is never outlawed. Any record that may involve a case of fraud should have thoughtful consideration before

Reports and statements regarding accidents, when not necessary to support claims or vouchers	10 years
Reports and statements regarding personal injuries, when not necessary to support claims or vouchers	10 years
Correspondence and records thereof relating to all subjects. It is suggested all correspondence before being sent to the file be stamped or marked "temporary," "regular," or "permanent."	
temporary	6 mos.
regular	7 years
permanent	permanent
Copies of telegrams, including relay copies, if the original or other copies of such messages are retained, as provided for in item above	6 mos.
Stenographers' note books	at once
Phonograph and other mechanical device records	at once
Written authorities, cancellation of authorities, certificates of destruction, records of appointment of executive officers and committees having supervision of the destruction of records, bulletins, circulars, instructions and lists or schedules of forms and records pertaining to the destruction of records	permanent
Applications for employment	permanent
Reports and certificates of examinations	permanent
Efficiency tests	7 years
Applications for employment and replies thereto not resulting in employment of applicant	2 years
Service records and matters pertaining to pension records	permanent
Circulars and notices of instructions to employees on matters of discipline, deportment and other subjects	1 year
Schedule of fire and other insurance, also records of payment of premiums and of amounts recovered, and papers substantiating claims against insurance companies	6 years
Insurance policies	
Fire	2 years
Liability	7 years
Marine	7 years
Journal entries and supporting papers	permanent
General and auxiliary ledgers and indexes thereto	permanent
Balance sheets of general ledgers	permanent
Trial balance sheets of general and auxiliary ledgers (includes work sheets)	permanent
Stock ledgers (materials and supplies)	3 years
Copies of orders for the purchase of materials and supplies	6 years
Requisitions forming basis of purchasing departmental order	1 year
Bids and offers and correspondence pertaining to the sale or purchase of materials and supplies	3 years
Payrolls and summaries	permanent
Records and memoranda pertaining to deductions from payrolls	6 years
Receipted pay checks and other evidences of payments for services rendered by employees	6 years
Time books—time cards	6 years
Record of assignments, attachments and garnishments, and garnishment of employees' salaries	3 years
Records and memoranda of the cost or the inventory value of equipment and fixed property	permanent
Contracts and other agreements relating to the construction, acquisition or sale of equipment and fixed property	permanent
Annual reports or statements to stockholders, file copies of, and supporting papers	permanent
Governmental reports	permanent

Record of securities owned, in treasury, or with custodians	permanent
Copies of schedules and returns to taxing authorities for tax purposes; records of appeals, tax bills and statements	permanent
Register of audited vouchers	permanent
Paid drafts, paid checks	6 years
Passes issued to visitors and trades peoples	3 mos.

Classification of records. As is clearly indicated by the foregoing discussion, it is impossible to lay down definite rules that will hold good in all cases. Nevertheless, by making a simple, common-sense analysis of the various kinds of records in a company, the procedure to be followed in each case can be determined without difficulty.

Such an analysis will show that there are, in the main, three classes of records for which a definite plan must be provided. The most important are (1) those records which contain or refer to the broad, underlying policies of the business. Such records are the "common law" of that business, one might say, and for this reason they must be kept accessible indefinitely. Next are (2) the more important records of progress, such as annual reports, summaries of departmental operations, financial statements, and so on. It is usually necessary to retain in the active files only those of a few previous years, since the report of any given current year is frequently compared with the corresponding one for the previous year. Of the least importance are (3) the records which have to do with routine matters, such as routine correspondence, interoffice memoranda, daily or weekly departmental progress reports, and so on.

With a classification such as this in mind, one can readily enough decide into which of the three groups any particular piece or class of material falls, and thus establish a definite procedure for its transfer. In general, material in class 1 should be kept indefinitely, that in class 2 should be kept from three to five years, while class 3 material may be disposed of at the end of a year.

File-transfer methods. Having classified the records in some such way as just described, the next step is to decide when and how the material is to be transferred from the active to the inactive files. There are three ways in which this may be done. One plan is to transfer each year, intact, the entire material of the second preceding year. Thus, for example, the 1947 routine correspondence, periodic reports, and other material, which would fall in classifications 2 and 3 above, would be transferred in January, 1949, from the active to the inactive files. When this method is

followed, there is always at least one year's back material in the active files. If the classification of papers has been properly made, it is not likely to be necessary to make any more than very infrequent reference, at the most, to the material in the inactive files.

A second method, which is a variation of the first, is to transfer material of a certain age, say, one year, periodically from the active to the inactive files. This transfer may be made as often as may seem desirable; every three months is a very usual period. This "continuous transfer" method has the advantage of spreading the work more evenly over the year rather than concentrating it once a year, as is done in the case of the first method. Moreover, the continuous method avoids the sudden break that necessarily occurs when the first method is used.

A third method of transferring material from the active to the inactive files is to use a specific unit of work, such as a customer's job or order in the manufacturing business previously cited, as a basis for deciding when material is to be transferred. If this plan is used, the file clerks can be instructed to hold open as active a folder with a given order number until some definite point in the transaction has been reached, such as the receipt of a check in payment of the goods. After allowing a period of grace, such as a week or ten days, beyond this limit, during which any odd papers that may be out in the hands of the various office departments will be returned, the file clerk may consider that job order number closed, and transfer it to the inactive files.

Arrangement of records in inactive files. Having decided when the material is to be transferred and how this process is to be carried through, there remain for consideration the arrangement and storage of the records in the inactive files. This matter may be discussed logically under three heads: (1) the possible places of storage, (2) the kind of equipment best suited for record storage purposes, and (3) the way in which the material should be arranged.

Storage space. Either one of two places is to be recommended as suitable for the storage of inactive material. In a number of the larger cities, rooms especially designed for the purpose normally are available in certain public warehouses. In some cases these rooms are entirely empty; in other cases filing equipment is provided. Some warehouse companies even provide file clerks, whose services are available when papers are to be brought in or removed. The use of warehouse space by business firms for the storage of inactive records seems to be increasing. The chief advantages to

be secured by the adoption of this plan are the security of records against damage or loss by theft, fire, or vermin, and their accessibility. Payment is made, of course, only for space actually occupied.

A number of larger business organizations maintain their own warehouse buildings for record storage. Among these are Westinghouse Electric Company in Pittsburgh, Metropolitan Life Insurance Company in Bronxville, New York, and Prudential Life Insurance Company in Newark. Under such an arrangement valuable space at the general office and at branch offices is conserved, yet the records are afforded the protection and care they require. In the case of Prudential, a five-story building is devoted entirely to filing operations, both inactive and active. This is made possible by the close proximity of this building to the home offices.

Most companies, however, store inactive records in their own offices. In this case the space used should be that which is the least desirable for general use. In every office there is space that has little or no natural light, or where the ventilation is poor. Such space may be effectively utilized by fitting it up as a storage room for inactive records. Study of the existing layout and space occupied will usually reveal that there is room of the kind just described suitable for storage purposes.

Equipment needed. The matter of selecting the proper equipment for storage purposes is fully as important as finding a suitable place for it. In this connection the office manager must strike as nearly as is practical the proper balance between two extremes. It is a senseless waste of money, on the one hand, to invest in storage equipment of the same quality and type as that used for the filing of active material. On the other hand, the use of cheap, flimsy containers is equally poor economy. A primary consideration in connection with the transfer of records from the active to the inactive files is that the material, inactive though it may be, will be in perfect condition for use whenever the need may arise. It is, therefore, simply common sense, as well as good management, to use equipment of sufficiently high quality to safeguard adequately and properly the records stored therein. Durable and suitable transfer filing cases, especially designed for the purpose, are made by a number of reliable manufacturers of office equipment, and it is this type which the office manager should use for transfer purposes.

Filing inactive material. Last, but by no means least, careful consideration must be given to the method to be used in arranging the material in the inactive files. From observation of the method, or, more properly speaking, the lack of method, of a considerable number of concerns, the writer has no hesitation in saying that the chief point for the office manager to bear in mind in this connection is the fact that an archives department is not an enlarged waste-paper basket or a household attic. The proper storage of inactive records demands that the material be put away in an orderly and systematic manner, so that it can be found as readily and as easily as material in the active files. The practice of tying up inactive records in huge bundles and stacking them ceiling high in the storage space, as often as not without even a tag, or at best with one which is descriptive of the content of the package only in the most general way, is largely a waste of time and money. It may take a little more time to place the material carefully and in an orderly manner in transfer cases, marking each plainly with a label, but the results more than offset the effort. As a matter of fact, there is no good reason why it should not be just as easy to find inactive material as that which is active and, in all well-managed companies, this is the case. If the inactive records cannot be found when they are needed after they are stored, the money and effort expended in storing them has been wasted.

The Westinghouse Archives Building [4]

An entire building has been acquired by Westinghouse Electric Corp., in Pittsburgh for the storage of records and the storage and maintenance of surplus office equipment. The Archives Building is 80′ by 300′ and provides 144,000 sq. ft. on its five floors and basement. Part of the first two floors contains the offices of the building's staff. Fireproof vaults on the first floor house microfilm. Floors three, four and five are fitted with 37,728 ft. of steel shelving 37″ wide, which is installed in four-shelf tiers to provide filing space for 18″ deep boxes. Two sizes of boxes are used; one size for 5″ × 8″ or smaller records and another size for records up to 8½″ × 11″. Some 200,000 of these boxes will rest on the shelving.

The building will relieve the central records bureaus, located throughout the far-flung organization, of their rapidly accumulating piles of inactive records. In many cases, high rental was paid for outside storage and, even then, the facilities were not ideally suited to the job. The

[4] Neaidengard, R. C., "Westinghouse Archives Building," *The Office*, September, 1946, p. 74.

Ease of reference to records includes the factors of speed and convenience. Assuming that both the original records and the microfilm are stored in reference rooms and that both are indexed as completely as possible, it appears that there is no appreciable difference in the speed of reference between the two methods of filing. It is impossible to quote any exact figures, however, because ease of reference depends upon such things as the total number of documents from which a given record must be selected, the form in which the physical records are kept (card file, letter file, bound volumes) and several other variables. The speed of reference to microfilm varies with the total number of reels from which the proper reel must be selected and with the nature of the indexing system.

The next factor is convenience of reference. It must be realized that in most microfilm installations designed primarily for reference, there is only one working film available on the premises. The central filing department will have this reference film and requests for information regarding a given document can be answered over the telephone. However, should the interested party desire to see the document, the information being too voluminous to permit of transmittal over the telephone, it is necessary for the film to be consulted in the filing department unless desk readers have been distributed at strategic points throughout the office.

The second point to be considered is the amount of space saved when reference files are placed on microfilm, and the value of the microfilm process to a particular concern may well hinge upon this factor. Microfilm will occupy approximately 1 per cent of the space required by records stored in files. If space is the most pressing problem, the application of microfilm deserves serious investigation.

The third factor to be considered when weighing the use of microfilm for reference files is the necessity for making reproductions. An immediate objection to the use of film arises from the fact that the films can be used only for reference in a reader and it is not possible to present an individual document to the person requesting it. However, microfilm, as commonly used, is in negative form, and should it be necessary to produce a copy of an individual document, a facsimile can be created with but little difficulty in a number of ways.

Only after weighing these factors can the office manager determine what part microfilming should play in the solution of his record storage problems.

Analyzing the work of the filing department.[6] The following questions indicate a method which the office manager may use to audit and analyze the work of the filing department. The list is intended, of course, to suggest a method of attack and not to be inclusive.

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[6] *Office Management Handbook*, National Office Management Association, 1947.

1. Is centralized control of all filing maintained?
2. Is physical centralization introduced wherever possible?
3. Are files examined to eliminate the maintenance of duplicate material wherever possible?
4. Is there a list or a chart showing the location of files?
5. Are files neatly and clearly labeled?
6. Is a workable "out" system used?
7. Are the most accessible file drawers used for files most frequently referred to?
8. Is the filing production maintained so that work does not pile up?
9. Is filing production measured and standards set for various classes of material?
10. Is each drawer of each file cabinet equally filled?
11. Is there sufficient space for future expansion?
12. Examine 1,000 pieces of filing for accuracy. There should be fewer than 10 errors in the thousand.
13. Examine the contents of one file drawer. Were all of these papers worth filing?
14. Is it a practice to mark the retention period of all material before it is sent to the files?
15. Is the filing system simplified to the greatest extent?
16. Is each file clerk made responsible for a certain section of the filing?
17. Are new file clerks adequately trained?
18. Has a definite retention period been established for all classes of office records?
19. Is this retention period maintained and obsolete material destroyed?
20. Is someone assigned to police this matter?
21. Has microfilming been investigated to determine whether money can be saved by using it for those records which must be maintained either permanently or for long periods of time?

8

Organization and Work of the Stenographic Department

Evolution of dictation and stenographic methods. For many years the accepted practice in business offices was to furnish everyone of any importance with a private secretary and a private office. Junior executives who, as a matter of fact, had only a limited amount of authority in the organization were, nevertheless, dignified by these supposedly inalienable rights of the executive. In many cases, needless to say, neither of these pieces of "stage setting" were necessary or even desirable. Moreover, they were inevitably expensive.

Some twenty years ago the movement toward the centralized stenographic department began. Gradually, first one firm and then another began to see the desirability of transferring to a centralized typewriting department certain routine straight copying and typing work. Thus the private secretary who did not become a member of the centralized stenographic group was left with less work to do. Today, one may go into a very large number of concerns and find that only the chief executives and the more important members of the organization have private secretaries for their own exclusive use. The junior executive's former private secretary has become a member of a centralized stenographic department.

The invention and constantly widening adoption of the dictating machine has had an important influence on this development. Where such equipment is installed, the usual practice is to supply all or most of the dictators with a dictating machine and concentrate the transcription work under the direction of a supervisor in a centralized transcription department.

The private secretary. From what has just been said, it should not be assumed that the private-secretarial arrangement is a thing of the past, nor that, under certain circumstances, it is not the most practical method of organization. Like the private office, certain executives are entitled to, and need, private secretaries.

The office manager is likely to have two principal responsibilities in connection with the private secretaries: First, he is expected to be reasonably familiar with the kinds of work which these employees can and should do; second, as chief personnel officer, he may be asked by one of the executive officers to assist in selecting a secretary.

Duties of the private secretary. The position of the executive and the nature of the business organization will determine, for the most part, the duties of the private secretary and the relative importance of these duties. However, the following list is representative of those found in most responsible secretarial positions:

To take routine and some specialized dictation, such as financial, legal, engineering, or a combination of all.

To transcribe shorthand or dictating machine records.

To make notes of conferences or meetings; sometimes testimony.

To organize and maintain specialized files.

To organize the local office routine, including incoming mail, handling of the principal's appointments, arrangement of travel and hotel reservations, and other similar details.

To gather material for reports and often to prepare the entire report in rough draft.

To organize and manage the work for the clerks and stenographers in the immediate office, so as to produce the information and facts required by the executive.

To handle whatever of the executive's personal affairs he might request.

To handle callers for the executive and, wherever possible, relieve him of the burden of dealing with routine matters.

In general, to preserve as much of the executive's time as possible so that it may be devoted to the planning and administration of those affairs of the company for which he is responsible.

Personal traits of the private secretary. In addition to the technical ability required in various secretarial situations, the following personal traits are generally essential.[1]

EFFICIENCY

Punctuality—On time in the morning and at noon; on time with work when required.

Cooperation—Attempt always to see from the other's viewpoint.

Accuracy—Standardize, wherever possible, to avoid errors; double check to eliminate them.

LOYALTY

To the boss and to the business; avoidance of petty gossip, the guarding of office information.

INTELLIGENCE

The ability to reason clearly and to apply acquired knowledge to the successful solution of problems arising in new situations.

Practical application of the foregoing capacities concerning the duties and personal traits essential to success in secretarial work will help the office manager to carry out such responsibilities as he may have regarding the supervision and selection of these employees.

Conditions in the average office. An impartial study of conditions in the average office in which all stenographic work is decentralized or departmentalized is likely to reveal the existence of a number of uneconomical and inefficient situations.

If a time study were taken of the amount of work actually done by the various private secretaries in an office where such an arrangement exists, it would be found in most cases that there is a surplus of stenographers. In other words, the tendency is always to employ more stenographers than necessary. It may happen, for example, that there is more work in a given department than one secretary can handle, yet, when an additional person is hired, there is not sufficient work to keep both girls adequately employed. Furthermore, the amount of work which private secretaries are called upon to perform varies widely between departments. Owing to the nature of the work, or to the habits of the department head, one girl may be kept extremely busy and, as a matter of fact, have more work to do than she can turn out. The girl in the next office, however, having a similar position, may have the problem of making five hours of work a day cover seven hours' attendance at the office. Naturally, such conditions lead to petty jealousies and charges of favoritism on the part of one girl.

It is also true that often the girls do not possess the same ability

and training. Too frequently secretaries are judged by the department head at the time they apply for work on factors other than those of capability. The result is that one may find girls who are exceptionally well qualified for the work and others who are poorly trained receiving equal pay.

Perhaps the most important practical difficulty with the whole private-secretarial arrangement is the annoyance to department heads when the secretary is absent on account of illness, vacation, or other causes. In such cases, it is necessary, under the private-secretarial plan, for the department head to make special arrangements to borrow someone else from another department temporarily, an arrangement which is highly unsatisfactory to both the department head and the employee.

Production and costs of centralized and departmental plans compared. The experience of Thomas A. Edison, Inc., manufacturer of Ediphone dictating and transcribing machines, and the data which it has secured, during hundreds of surveys of the methods of handling correspondence in offices of all sizes and types of business, amply substantiate the foregoing comments.

In a work day of 480 minutes, secretaries and stenographers, using shorthand and working under the decentralized plan, spend their time, on the average, as follows:

11% taking dictation
18% transcribing dictation
18% copy work
45% clerical
5% non-productive
3% absent

Under a centralized plan, using dictating machines, the time was spent as follows:

91% transcribing
6% rest
3% absent

In the majority of cases where centralization took place, the clerical and copy work which the shorthand stenographer was performing could be assigned to other clerical workers on a lower salary scale.

Measurements of production showed that the stenographer averaged 42 lines per hour (including time for dictation), whereas

when the work was centralized with dictating machines, the production was 120 lines per hour. Based upon an average wage of $38 per 40 hour week, it cost $22.80 per 1000 lines under the decentralized, shorthand method and $7.89 per 1000 lines under the centralized, dictating machine plan. Translated into costs per letter, the former method averaged $.264 per 12-line letter and the latter, $.094 per 12-line letter.

It would seem, then, that here is a fertile field for study on the part of any office manager who is interested in speeding up service and reducing unit costs of operation.

Advantages of a centralized stenographic department. Among the advantages accruing to an organization that establishes a centralized typing and stenographic unit are these:

1. The surplus of workers in each department is reduced, and the surplus in the central department is increased, providing an organization for handling peak loads.
2. Work is properly assigned according to class of work.
3. The work is equally distributed.
4. Less time is wasted.
5. Wages are consistent.
6. Definite standards are maintained; uniform quality and style of work will reflect credit on the firm.
7. There is no distracting noise; typewriting is isolated from executives and clerical workers.
8. All stenographers receive better training.
9. Work is not held over in the absence of a stenographer, as her work is done by others.
10. Stenographers are familiar with each dictator's style and dictation—not just with that of one.
11. There is a continuity of work—the work is not affected by the coming and going of the personnel of the central department.

Disadvantages of the centralized plan. There are, however, certain possible disadvantages of a centralized stenographic arrangement. These may be summarized as follows:

1. Dictators develop preferences for the more efficient, better-looking stenographers. Stenographers likewise request "steady" assignments and do not like to change dictators frequently. This objection is not present when dictating machines are used.
2. Unless costs are charged back to the departments using the services, there is a tendency to assign work which, upon analysis, is seen to be unnecessary.
3. Dictators dislike having their work scheduled and frequently demand "rush" service.

which the department will operate, despite absences due to illness and vacations.

Generally, the best girls should be assigned to machine transcription, the next best to stenographic, and the least competent to the copy work. Copy work is normally assigned to girls who have been typists, although the typing they will do is, of course, by no means to be confined to that of the department from which they have been transferred.

The reasons for the assignment of the best girls to machine transcription merit a word of explanation. In transcribing shorthand notes, stenographers have two advantages over dictating-machine operators. First, the stenographer reads with her eyes, the dictating-machine operator must read with her ears—and since most persons get a much more definite impression through the eye than through the ear, the stenographer has a natural advantage. Furthermore, the stenographer has not only heard the dictation once, but has had an opportunity to ask questions, while the dictating-machine operator, listening to the cylinder or record, is hearing the dictation for the first time. She must be keener, have a better background, a better power of concentration, and initiative and courage enough to write good sense and good English no matter what she may think she hears.

Much depends on the collection and delivery system—the collection of cylinders or records and folders in the case of a dictating-machine installation, and the delivery to the dictator of both dictating-machine and shorthand transcription. Collection of cylinders or records from dictators' desks, or from a central station in each department, should be made at least hourly. It may even be advisable to have half-hourly collections in the early afternoon. The messengers assigned to this work should see that the dictators are supplied with cylinders or records at all times, and that the transcribed cylinders or records are collected from the operators' desks promptly.

A practical way to get started. One practical and simple way to introduce the organization of a centralized stenographic department, particularly in a company where there may be some opposition, is to start on a small scale with a few departmental stenographic workers, guaranteeing to serve satisfactorily the departments from which they are taken. Sometimes the work of the departments is such that two or three or more of them have extra work which their regular employees cannot handle and they are

chines, business requirements; are deficient in work methods, spelling, punctuation, accuracy, and speed.

4. In most offices supervision is poor, discipline is lax. The increase in quantities of work to be done has created a let-down in quality of work.

5. Failure by business to train and instruct, to correct habitual errors, to keep production records, and to teach best use of equipment perpetuate the low skills acquired in schools.

Many companies have found the only answer to the problem of the green operator is to put her to work as a page, messenger, clerk or helper, giving her free time to attend classes or to practice.

Eastman Kodak Company, The Pennsylvania Company, Quaker Oats Company, Swift & Company, Northern Trust Company, many large insurance companies and other employers of typists start operators in messenger and clerical jobs, and put them through a training course or school until they qualify as typists or stenographers.

Executives of these companies point out there are five important points in any program of cutting typing and stenographic costs. They are:

1. Determining the skill of beginners and placing them on work at the proper level.

2. Conducting a planned training program to prepare beginners for higher jobs as typists and stenographers.

3. Use of a company manual, style book or instruction sheets to standardize style, methods, and practices.

4. Strict supervision to maintain best working habits and methods. Instruction in proper use of equipment.

5. Use of motion study, job instruction and job planning. Better work assignment methods.

Testing new operators. The first step in any cost-cutting program is to test every new operator as soon as hired. This test is not the usual pre-employment examination. It covers a wider field and is designed to determine present skills, enable the supervisor to assign work for which the employee is fitted, and to plan a training program to develop the speed and accuracy required of the employee.

It is not enough to give a test which consists simply of copying a page or two of material, then checking the work for errors and making an estimate of speed. Neither is it enough to ask a beginner to transcribe the dictation and use the result as an example of her skill.

Tests should include typing from corrected copy, tabular matter, detecting errors in a list of commonly misspelled words, and perhaps questions to determine the operator's familiarity with the machine used. Many executives think speed, as expressed in words-per-minute, is stressed too much in deciding an operator's skill. More elaborate tests require the typist to: set up material such as columns of statistics; arrange material, such as reports, in the proper form; answer questions on the use of the machine; center columns of words and figures; space

standard secretarial manuals for drills in punctuation. Similar sources are used for brush-ups or training in English and grammar.

In a number of large offices typists are graded according to the type of work they do. There may be as many as four different grades of typists, such as beginners, juniors, seniors, experts. Or they may be called by the types of work assigned to them—copy typists, transcribers, stenographers, statistical typists—the last named being the most skilled and highly paid of all.

As the training program is finished it is important to determine what type of work should be assigned to each operator who completed her course. It is an advantage to have the work as carefully classified as possible: so an operator who has just barely come through training with passable grades may be assigned to simple tasks, while one who shows great skill and possibility may be given more difficult work.

Another advantage of classifying the work is that the girl has more chances for promotion. There should be pay differentials for each class of work.

Once the operator is finished with her training and is assigned a full-time typing job, the training is by no means completed. In departments such as those operated by Le Tourneau Company, Northern Trust Company, General Electric X-Ray Corporation, Quaker Oats Company, Eastman Kodak Company, Workman Service, Inc., and others, training is perpetual and never ceases. Only through constant training and careful supervision is it possible to maintain the quality and quantity of work needed in modern business.

Preparation and use of manuals. Practically every well-managed typing department uses a manual for typists. For example, Union Carbide & Carbon Corporation uses a 56-page, 8½ by 11-inch book for the spelling and shorthand symbols of technical words alone. General Electric X-Ray Corporation uses a 38-page, 8½ by 11-inch book of five sections as a manual for its stenographers and transcribers. One of Chicago's largest banks uses a loose-leaf, leather covered, 88-page, printed manual; while United States Gypsum Company uses 32 Mimeographed and Dittoed pages stapled together for the same purpose. Other companies have less comprehensive manuals in the form of small notebooks with the necessary instruction.

Many companies started with informal, typed or duplicated manuals, gradually adding information until it was possible to publish a formal, printed, well-illustrated manual. R. G. Le Tourneau, Inc., of Peoria, uses illustrations of its various machines, with brief descriptions of them. In some organizations a company catalog will serve this purpose better and the supervisor should decide whether a company catalog should be part of every typist's equipment. A price list may suffice, or some other list of products.

Almost every company will need special sections in its manual, such as a list of railroads and their abbreviations included in United States Gypsum's manual. Another company might need a list of salesmen, a list of best customers, wholesalers or distributors. Still another com-

have designed a lift box, which is a platform 2 to 4 inches high, on which the typewriter is placed, raising it from 26 to 28 to 30 inches. About 3,500 typists in the Department of Agriculture at Washington are using these lift boxes.

Teaching proper use of machines. Beginners and even some experienced typists are not adequately acquainted with their machines. The supervisor should instruct every member of the typing department, paying particular attention to the following items:

1. Proper method of inserting papers in machine.
2. Returning carriage with proper stroke or motion.
3. Rhythm and even touch in operating.
4. Using tabular stops to minimize use of space bar.
5. Typing special symbols and characters such as %, @, *, /.
6. Short cuts in reinserting and lining up typed material.
7. Chain feeding cards, envelopes and small forms.
8. Short cuts in jogging and inserting multiple copy jobs.
9. Stencil cutting.
10. Centering, placement, typing tabular jobs, etc.

No typewriter can be used properly unless it is kept scrupulously clean. Set a time for daily cleaning, wiping and brushing. Do not permit operators to oil typewriters. Have a mechanic to do that or call the serviceman from the typewriter company. Make liberal use of servicemen to keep machines in the best possible condition, having platens treated (or buy new ones) as frequently as necessary. Petty economies, when compared with present-day salaries, are false economies in typing departments.

Job instruction and work organization. Executives at People's Gas Light & Coke Company say they have cut typing costs as much as 50 per cent by determining the correct placement of work on the desk, by planning, by providing written instruction for each new job, and by motion study.

It is impossible to establish strict procedures on the "mine run" of work, but where certain heavy jobs come into the department at regular or frequent intervals, considerable study is warranted in preparation of job instructions. For example, at a large gas company it is necessary to write a considerable number of orders for pavement repair jobs which are let to paving contractors. A 12-page job instruction procedure has been written to cover these orders. It contains a description of the job, which tells why the orders are written. It outlines the routine of the job, steps to follow, the typing formula, gives a hand motion chart, includes a job break-down and a list of addresses of contractors. All the forms used in the job are included in the procedure, with exact instructions for completing each one. Supervisors explain the procedure to new typists, and as the job recurs they use the procedure for reference.

The typing department supervisor of a large bank says the typing department studies forms to find time saving and short-cut opportunities.

signatures, complimentary close, second-sheet headings, identifying initials, and carbon copies. The subject of office manuals, with particular reference to stenographic manuals, is covered in Chapter 16.

When a large volume of correspondence is of a routine nature, form paragraphs and form letters are often used to advantage. In preparing form letters, the first step is to analyze and classify routine situations. The office manager, or a specialist employed for this purpose, then prepares a set of letters which, with the appropriate references to the particular letter being answered, such as the name, date, and so on, can be used over and over again. Thus the person to whom the letter is sent feels that he or she is receiving a personally dictated letter. Such letters, of course, are not processed letters, but are merely forms which the typist copies.

In cases where it is not possible to write a form letter which will fully cover every situation, a series of form paragraphs may be prepared for use by the correspondents and dictators. Each such paragraph is numbered. The correspondent, in answering a letter, indicates the paragraph numbers to be used. The typist, in answering the letter, merely refers in her copy of the correspondence manual to the form paragraphs as marked by the dictator and copies them in the order given.

Incentive compensation plans. In recent years an increasing number of companies have established wage systems based on the amount of work produced. Such plans have been especially widely adopted in connection with the work of centralized stenographic and transcription departments. This important part of the organization and operation of the stenographic department is treated in Chapter 23.

9

Organization and Work of the General Service Units

Methods of handling incoming mail. The handling of mail is almost always centralized. Even in the small office the single office boy usually handles all the mail.

The procedure followed in handling incoming mail in the average company may be summarized as follows:

1. The mail is obtained from the post office by a company messenger, or delivered to the company by the letter carrier. Large companies usually find it desirable to have their own messengers call at the post office to secure the mail.

2. Upon receipt in the mailing department, all mail, except that marked "Personal," is opened. Practice differs with regard to the manner in which personal letters are handled. Many of the larger companies discourage subordinate employees, either directly or indirectly, from receiving personal communications in the office, some going so far as to redirect such letters to the home address of the employees as soon as they are received. Other organizations, however, feel that since the total volume of employees' mail is but a small fraction of the entire amount received, the easiest way, everything considered, is to handle employees' personal mail in the same way that company letters are taken care of.

Letters addressed to specific individuals occupying executive positions in the company may or may not be opened by the mailing department. Some organizations have a rigid rule that all mail, no matter whether it is addressed to the company or to an individual, shall be opened in the mailing department. This plan is followed on the assumption that a large majority of the communications received deal with company business and that, consequently, all mail should be examined in the mail room first so that it can be routed to the right department or individual. The majority of companies, however, have mail which is addressed to individuals delivered directly to them unopened, on the assumption that a considerable number of such communications may be of a confidential nature. While no great harm can come, perhaps, from having them hastily scanned in the mailing department to determine to whom they shall be delivered, occasionally matters might be seen by subordinate employees about which it might be better that they did not know, for one reason or another.

If the volume of incoming mail is small, it is generally opened by hand; if not, either hand or electrically operated mail-opening machines are used.

3. As soon as the letters have been opened, all those containing checks or cash may be put into a separate pile for direct delivery to the cashier's department, or the money may be detached and a notation made on the face of the letter stating the amount enclosed. If the latter method is followed, it is necessary to have one or more clerks in the mailing room enter, on designated forms, the names of customers from whom money has been received, together with the amounts enclosed.

4. As the letters are opened and those containing remittances disposed of in one way or another, they are sorted by departments, sections, and, in certain cases, by individuals. Practice differs widely, but in a large concern the mailing department will sort only by main departments or sections, except when letters are addressed specifically to certain chief executives. Racks or large circular bins may be provided for sorting mail. Some companies make a practice of time-stamping all incoming mail as it is sorted.

5. After the mail has been sorted by departments, it is ready for delivery by messengers to the various departments. Since it is highly desirable that all the steps outlined above shall have been performed and completed by the time the office opens, it is the usual practice to have certain members of the mailing department arrive somewhat in advance of the regular office hours.

Methods of handling outgoing mail. Outgoing mail is usually handled as follows:

1. The messenger department collects outgoing mail periodically from the outgoing-mail letter trays or baskets on the desks in the various departments. The organization of this activity is discussed in a subsequent section.

2. As outgoing mail is received in the mailing room, it is folded, inserted in envelopes, sealed, and stamped. Sometimes enclosures, such as booklets or return reply cards, must be enclosed. Particular care must be taken to be sure that all enclosures that are to accompany the letter and the envelope are actually enclosed. Large mailing departments use sealing and stamping machines, operated by hand or electrically. The folding and sealing of all mail, whether by machine or by hand, must be done carefully and neatly, so that when the letter arrives and is taken from its envelope by the recipient, it makes a good impression and does not show signs of carelessness or hasty work.

Outgoing mail should be coördinated as closely as possible with airplane, train, and boat schedules. The head of the mailing de-

partment should find out from the post office the closing hour for mail which is to be sent by a certain train, boat, or plane. Schedules showing the time at which letters must leave the company mailing department in order to meet these closing times should then be prepared and posted in a conspicuous place in the mailing room. Supplementary schedules showing the time of the last departmental pick-up for such mail should be distributed to all departments to enable them to prepare their mail in time to meet the mailing-room schedules. If this practice is followed, letters will reach their destination promptly.

For selfish reasons, if for no other, as much of the outgoing mail as possible should be dispatched early in the day. To this end, periodic collections of outgoing mail should be made from the various departments in the office during the forenoon, and a preliminary outgoing mail should be sent not later than noontime. After this, outgoing mail should be sent away at least every two hours. In this way the inevitable peak load which comes toward the close of the business day may be somewhat reduced.

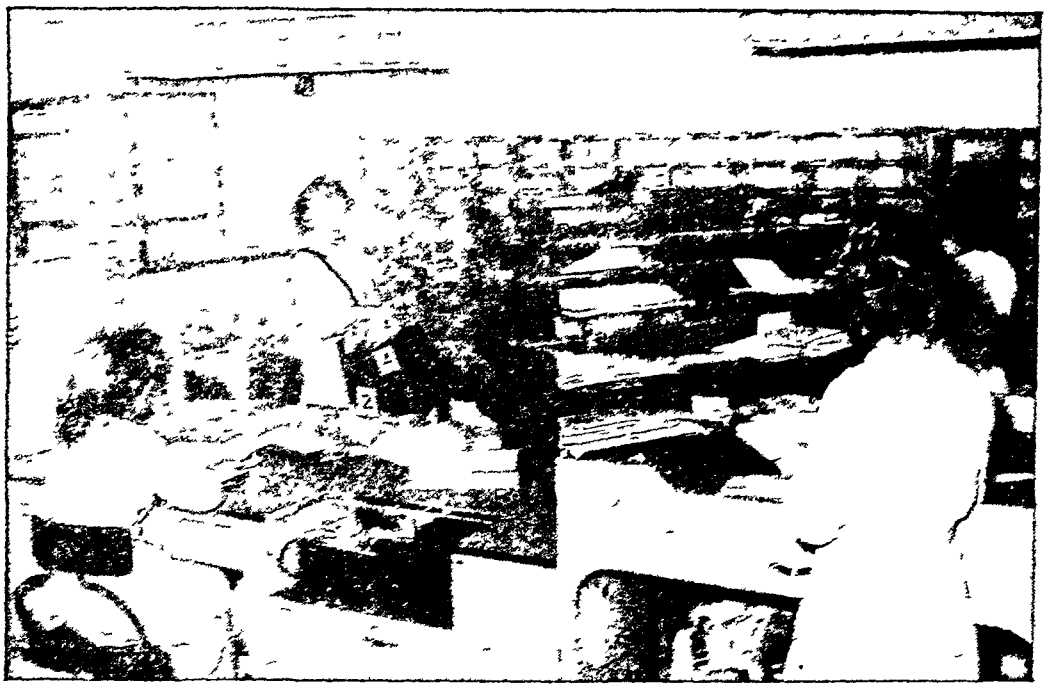
Mail handling at United Air Lines. The foregoing sections have described the methods of handling incoming and outgoing mail in the average business office. In a number of lines of business the mailing problem is of more than ordinary importance because of the exceptionally large volume handled. The practices of United Air Lines offer an excellent practical illustration of what is involved in such cases: [1]

"The new system recently adopted by the mailing department of United Air Lines, which handles more than 3,500 incoming and 3,700 outgoing letters daily, has stepped up delivery of company mail by as much as 2½ hours," reports F. T. Corneliussen, assistant office manager in the Chicago home office. "Mail formerly distributed to home offices at 10:30 now reaches these offices at 8:30. A survey over a 6 months' period shows that errors in mail handling have been cut to less than ½ of 1 per cent.

"This new system has conserved a third of the space formerly used for mailing and has reduced by more than half the number of motions required in many mail handling operations. This space is now used for the addressing and duplicating department. Operations of mail sorting which had required hours now take only a few minutes. Where workers formerly had to take many steps to sort mail into racks, they can now stand in one position. A specially designed sorting turntable saves hours in sorting and distributing our early morning mail, which is always the largest of the day.

"Here at United there is a heavy volume of correspondence and reports every day between the home office and its network of branches and division offices. Fast plane schedules require the work of these hundreds of United Air Lines' departments, branch ticket offices and airways operations offices to flow smoothly with a minimum of peak loads, errors and time lost in mail handling.

"Our problem was to meet these stringent requirements of mail handling operations. To do this we first conducted a time-and-motion study of our mailing procedure and had an extensive survey made by mailing engineers and postal authorities before installing the present system. We made a flow chart, indicating the steps necessary in handling incoming and outgoing mail, which was used as a guide in arranging and designing all mailing equipment."



every half hour until 3:00 o'clock and every 15 minutes from 3:00 to 5:00 o'clock. Air mail is picked up at 5:15. During the day six messengers make more than 3,000 such pick-up and delivery stops. Here are the steps that make this rapid mail distribution possible:

When the bags of mail are delivered to the mailing department, the mail is placed on large sorting tables running the full length of the L-shaped functionally designed mailing room. In back of these tables are racks of sorting compartments for handling incoming and outgoing mail.

In handling incoming mail primary sorting is unnecessary. It is placed on a large sorting table in the center of the room. At the left on this table is an especially constructed metal revolving sorting rack, with four trays on each side.

The lower three trays are for mail going to the three floors of the home office. All mail addressed to the attention of some one in United Air Lines, or to the cashier's department, is placed in the top tray. Only the mail placed in the top tray will be opened in the mailing department. Both incoming and outgoing mail sent in envelopes marked "Company Pouch" is addressed to departments rather than to individuals, so changes or transfers of personnel will not affect this mail sorting system.

As soon as the trays are filled, the revolving sorting rack is turned around. Three girls on the opposite side of the table sort mail for each of the three floors. Mail boxes immediately in back of these girls are grouped for each floor to facilitate sorting. By this method a girl can remove mail from a tray and remain in one position while sorting. Mail boxes are labeled for departments on each floor.

Mail to be opened in the mailing department is removed from the top tray by a girl at a desk to the left of the sorting rack. This desk, which faces the three workers sorting mail into boxes, has an outer rim of six sorting slots. Slots are arranged for distributing opened mail according to floors, just as the unopened mail is sorted. After letters are run through an opening machine and the contents removed, envelopes are passed over a glass surface with a strong light beneath before dropping into another slot at the left of the desk. These envelopes are placed in large drawers marked for each day of the week and held one week before being discarded. The three girls on the opposite side of the desk take the opened mail from these slots and sort it according to departments. Only air mail, special delivery and registered mail are time stamped.

When mail addressed to the cashier's department contains checks or cash, an entry is made on a special form, which has the time and date printed at the top. As soon as this mail is opened, the girl at the desk records on this form the name, check number, date and amount of each check. She then signs this report, and it is delivered immediately to the cashier's department. The cashier indicates the time the checks and money are delivered to this department and also signs the form at the bottom. This receipted form is returned to the mailing department and placed in a permanent file. (See Figure 17.)

UNITED AIR LINES, INC.
REPORTS OF CHECKS AND CASH RECEIVED

TIME DATE

	NAME	CHECK NO	DATE	AMOUNT		
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Fig. 17—This form, used to record all checks and money, is signed at the bottom by the one who prepares it and is receipted by the cashier's department.

After incoming mail is sorted by floors and departments, it is placed in baskets, ready for delivery about 10 minutes after 8:00 by six messengers—two for each floor. These messengers also make the first mail pick-up of the day at this time, and the mailing department begins sorting outgoing mail. Time required to complete these scheduled runs for each messenger averages 10 minutes.

As messengers return with collected mail, it is placed on sorting tables in the outgoing mail section. Here a girl on one side of the sorting table divides this mail into three groups: Regular mail; company mail and mail for airports along United routes; and the third group consists of mail pertaining to air line traffic and mail going to other air lines.

On the other side of the table girls sort outgoing company mail into boxes. These mail boxes are also arranged for handling groups of mail so the girl can distribute letters by standing in one position. All letters for each branch are placed in one envelope, then put into company mail bags at the end of the sorting table.

The regular mail is taken to a separate section of the mailing department, where it is placed in boxes marked air mail, local, special delivery, registered, foreign. Mail is then weighed and the correct amount of postage set on a Pitney-Bowes meter for each group as it runs through the machine for stamping and sealing.

When the final pick-up for regular mail is made at 3:00 o'clock, a blue slip is left in each basket, which reads: "This sheet in your outgoing basket indicates the final pick-up of outgoing mail has been made for today. Please leave this sheet in your basket to be collected on the following morning." When the final pick-up of air mail has been made for the day at 5:15, a pink sheet is left in each outgoing basket.

Fig. 18.—United Air Lines' outgoing mail section is arranged so workers can distribute letters by remaining in one position.

preparing requisitions for applications to expedite the payment of death claims.

All mail at Prudential is divided into three broad classifications: Envelopes of various sizes and shapes are marked for home office mail, policyholders' mail and field office mail. First morning mail is picked up at the post office at 6:15. This mail is neatly stacked in hampers rather than in bags to facilitate sorting. This early morning mail usually consists of about 38 hampers and is delivered to the home office mailing department for primary sorting and opening by machine at 10 minutes before 7:00 each morning.

By 8:00 A.M. all policyholders' mail not addressed to individuals or specific departments—averaging about 2,500 letters per day—has been opened and sent to the policyholders' mail section for reading and directing to the right departments. Unidentified forms and documents are also sent to this department.

By 8:45 all incoming mail has been sorted according to floors and departments and is then sent to one of the three substations of the main mailing department. At this time messengers begin their scheduled half-hour pick-up and delivery service. Last mail collection of the day is at 3:35 P.M.

When outgoing mail is received in the mailing department it is classified according to home office, field offices and mail going to policyholders. District mail is sorted by divisions of the company organization, using portable Multisorts. All outgoing policyholder mail, which averages 42,000 letters a day, is run through meter machines for imprinting postage and sealing at the rate of 10,000 an hour.

The Addressograph section of the mailing department prepares forms for branch and division offices and automatically prints addresses on checks, envelopes, bulletins and company publications.

Forty-nine different kinds of checks are also prepared for mailing each day by the mailing department and are signed by check signing machine.

Another function of the mailing department is the handling of telegrams. The department uses two Teleprinters for sending telegrams by direct wire to Western Union's New York office and sends and receives more than a thousand telegrams a day.

To prevent unnecessary delays and errors, the department publishes a special list of instructions covering home office, policyholders' and field office mail. The address on mail going to field offices contains only the office designation, district number and state. Employees are kept posted on changes in daily pick-up schedules so the time of outgoing mail to branch offices complies with train schedules. To avoid peak loads, employees are advised to deposit mail regularly during the day.

Methods of reducing mailing costs. Since the advance in postage rates that took place a few years ago, increased attention has been given to methods of reducing mailing costs. By no means should it be assumed, therefore, that the entire duty of the mailing

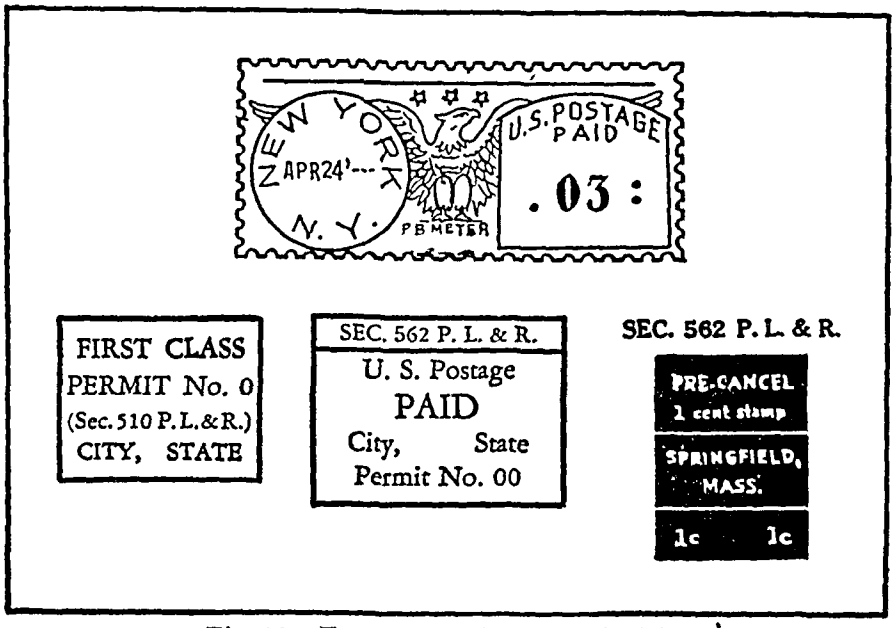


Fig. 20.—Four types of postage indicia.

as well as the envelopes themselves, must be of white or a light tint or shade.

Business Reply Envelope Forms

Collect-on-delivery, or business reply envelopes, are allowed. Two permissible forms are shown in Figures 21 and 22.

Concerns with branches or dealers who desire to distribute business reply envelopes from their main office to be returned to various dealers or branches may do so either under permit obtained at each of the offices to which envelopes are to be returned, or under one permit issued at the post office where the main office of the company is located.

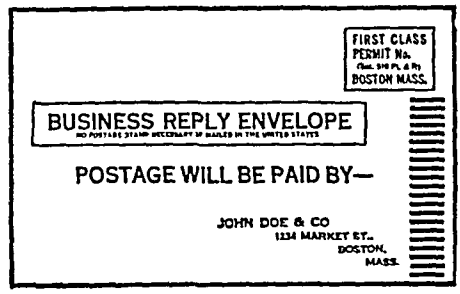


Fig. 21.—One Form of Business Reply Envelope.

Third-Class Matter

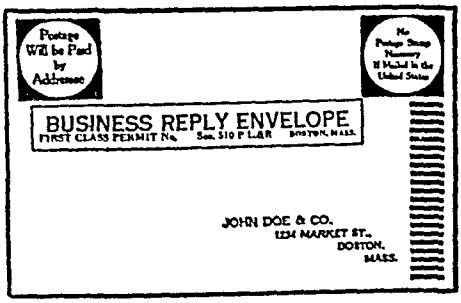


Fig. 22.—Another Form of Business Reply Envelope.

Third-class mail is printed matter and other mailable matter weighing eight ounces or less. "Printed matter" includes:

A. Single copies of straight printed matter (not reproductions of typewritten or handwritten matter). The rate is 1½ cents for each 2 ounces or fraction thereof. Stamps or postage meter machine without date line may be used.

B. Twenty or more copies of printed, multigraphed, mimeographed, or otherwise reproduced circulars, including reproductions of handwriting. The insertion of handwritten, typed, or stamped date and names of addressee and addressor is permitted. The rate is 1½ cents for each 2 ounces or fraction. Regular or precancelled stamps, postage meter machine, without date line, or printed non-meter indicia may be used.

C. Two hundred or more, or 20 pounds or more, of mail otherwise like (B) may be sent under bulk rate, if the mailer has a permit, and if the mail is sorted and faced for states and for all post offices receiving fifteen or more pieces. The rate is 12 cents per pound, but not less than 1 cent per piece. Precancelled stamps, printed non-meter indicia, or postage meter machine without date line may be used.

D. Books and catalogs of less than twenty-four pages and those having twenty-four pages or over (twenty-two of which are printed) and weighing 8 ounces or less each. The rates for single copies are 1 cent for each 2 ounces or fraction, and 8 cents per pound for 200 or more copies or 20 pounds or more, but not less than 1 cent per piece. The mailer must have a permit, and the mail must be sorted and faced for all states and all post offices receiving fifteen or more pieces. Precancelled stamps, printed non-meter indicia, or postage meter machine without date line may be used.

Merchandise, books and other articles, except circulars and miscellaneous printed matter, if weighing less than 8 ounces, may be sealed if the package carries the printed statement, "Postmaster: This parcel may be opened for postal inspection if necessary," and the return address of the sender is written or printed. The return and forwarding of third-class mail requires postage anew. Return of undeliverable third-class mail may be secured by printing upon the face in connection with the corner card a guarantee of postage payment. The forwarding address of third-class mail may be secured by printing in the lower left-hand corner, "Postmaster: If forwarding to a new address, notify sender on Form 3547, postage for which is guaranteed." Advertisers using Form 3547, however, should avoid annoying prospects who may have changed residence and left a forwarding address, by wording inscription as follows: "Postmaster: In case of removal, do not notify addressee but hold matter and state on Form 3547 amount of forwarding postage required. Forwarding postage and postage for notice guaranteed." If this is not done, the prospect must pay the cost of forwarding postage on delivery—a fruitful source of ill-will.

Other suggestions for reducing mail-handling costs. Aside from savings to be secured through a thorough knowledge of the postal regulations, there are many other ways in which mail-handling costs may be reduced.

1. Segregate outgoing mail for branch offices, plants, and other frequent destinations. Eliminate the practice of using individual envelopes. Send all mail to one destination in one large envelope. Do not fold such mail.

2. Prepare such envelopes in advance either by addressing the proper First and Fourth Class labels with an addressing machine or, if the quantity warrants it, by having the envelopes printed. One or more complete sets can then be provided each day.

3. Analyze, in advance, proposed mailings of printed material. Consider reducing the weight or trimming the size in order to conform to postal regulations. The U. S. Post Office will examine and rule on a sample if there is any doubt.

4. Keep a constant check on all mail which arrives from branches and plants having insufficient postage. Notify the offending sources to check the postal scales and to exercise more care in weighing in order to stop such errors.

5. Give the mail room the authority and responsibility to question any department's apparent misuse of higher postal rates, e.g., air mail, special delivery, and special handling. Such misuse is often due to the lack of knowledge of postal regulations on the part of these departments.

6. Consider the possibility of substituting single and double penny postcards for letters ordinarily used for order acknowledgments, answers to standardized customer inquiries, inquiries to vendors, and so forth.

From the foregoing it should be entirely clear that the organization and operation of a mailing department is by no means a simple task, especially in a large company. Knowledge of a large number of detailed technical postal regulations is essential. Accuracy, thoroughness, and initiative are qualities which every employee of the mailing department must possess. The office manager who allows his mailing department to be manned largely by inexperienced and untrained personnel, on the assumption that "anybody can take care of the mail," makes a serious and costly mistake.

Organization and work of the messenger service. With relatively few exceptions the type and appearance of messengers employed in the average concern, as well as the organization of their activities, is, unfortunately, nothing of which business houses may be proud. Like the mailing department, it is too often thought that anyone can be a messenger and that the messenger department should serve as a training school for all new employees. While it is true that the work which the average messenger performs does not require great ability, it is also true that the first impression that a company makes on visitors is often the result of contact with a member of the messenger department. Consequently, messengers should be selected on the basis of their personal cleanliness and appearance, as well as for their mental and physical ability to do the work. Courtesy, both to company visitors and to other employees, and a sense of responsibility should be emphasized. The

fact that a messenger's position is often merely an entering wedge from which promotion to a better-paying position comes should be constantly impressed on the minds of all messengers. Possibly the old facetious comment about hiring a new messenger boy when the president dies is somewhat farfetched, but it is certainly true that in many cases department heads needing a clerk for a minor position pick a messenger who has made a good impression on them.

These comments regarding the importance of the place that the messenger holds are not made for the purpose of dignifying the messenger's job, but rather to center attention on the attitude which the office manager should take toward the messengers and the department as a whole.

Control of the messenger's work. Regular schedules, close supervision, and very specific instructions comprise the three main points to be borne in mind in organizing and controlling the messenger service. A number of companies find it advantageous to employ a mature man as head of the messenger department, since such a person, provided he has the right type of forceful personality, can better control the work of the boys and their attitude toward their duties than could some less mature and experienced person.

The smooth functioning of the messenger service depends, to a large extent, upon the proper planning of the pick-up and delivery stations and the scheduling of trips to serve these stations. The central control point is generally the mail room and, if the size of the office requires it, several substations are established, each to serve a specified number of floors or departments. The departmental stations are served from these substations, which sort mail arriving at them so that it is ready for the messengers making deliveries to the departments. Each messenger is furnished with a mail bag or a mail cart with compartments to assist him in transporting the mail.

Under this plan of mail delivery, a letter arriving at the mail room is sorted into the proper substation rack, from which a messenger picks it up during a regularly scheduled trip and delivers it to the proper substation. The clerk in charge of the substation receives it and routes it to a messenger, who, using that substation as a base of operations, delivers it to the proper department. As this messenger makes his deliveries, he also picks up mail at each department and brings it to his substation. Mail for his route is sorted and returned to him. Mail for other substations and

for the mail room is sorted and picked up by the messenger operating out of the mail room, who delivers it to the proper points.

Many companies, especially large ones, use a card system for controlling the activities of the messengers. In some cases the messenger notes the exact time of his visit on a card attached to the outgoing mail box in each department. The head of the messenger department, in turn, has a control sheet which shows the time when each messenger left the central station and when he returned. In this way the head messenger may keep in close and constant touch with the activities of each of his messengers during the day.

Control over the promptness and number of trips made by each messenger throughout the day also may be maintained by the use of a series of numbered cards. The cards, which are made of heavy cardboard, give only a number; in other words, no effort is made to print or stamp the time on the individual cards. As each messenger leaves the mailing department he—or she—is given a set of numbers for that particular trip. As collections are made from each box, the card covering that trip number is deposited in the box and the card of the previous trip collected. The cards thus collected are returned to the supervisor of the mailing department at the end of the trip. No cards are issued in advance, nor are any of the messengers allowed to retain cards in their possession.

This system, which is automatic as well as simple, has been found most effective in checking both the promptness of the messengers in their collections, and their care in delivering and collecting at each box on each trip. If, for example, a complaint is made by an executive or employee that no collection has been made from his box for the last few hours, the person receiving the complaint simply asks him to give the number of the collection card then in the box. This number indicates at once the time when the last collection was actually made. If the messenger is behind schedule, or if he has skipped that box on the last trip, this fact is established without question immediately. If, on the other hand, the proper collection card is in the box, it is assumed that the messenger actually did call at the box and did collect whatever material was in it. In the same way, in cases of complaints of failure to collect material alleged to have been in the box, it can be assumed without serious question that if the number of the collection card is correct, the papers were not, as a matter of fact, in the box at the time the collection was made. It is obvious that without some such plan

as this, no basis exists for determining the facts in the case, and that dissatisfaction to all concerned is the result.

Reception and information service. One of the important general services for which the office manager is often responsible is the selection and supervision of reception and information clerks. Many companies have found it desirable to establish the position of reception clerk in their offices to receive visitors. The first impression of an organization on a visitor is gained through the reception clerk. Not only is the reception clerk a guardian of company good will, but she is also a guardian of the time and energy of employees and executives. Considerable time and annoyance, on the part of both the visitor and the organization, is saved by having the visitor directed expeditiously to the proper person in the organization.

Qualifications of a reception clerk. As the desk of the receptionist is the front door of the organization, considerable care should be exercised in selecting applicants for the position. The qualities desired, listed according to the frequency with which they were mentioned by fourteen companies who were queried on this point, were as follows: [4]

Pleasing personality
Good appearance
Tact
Good educational background
Poise
Conservative dress
Businesslike attitude
Common sense
Resourcefulness
Dignity
Reserve
Discrimination
Better than average intelligence
Cordiality
Patience
Quiet voice
Refinement
Even disposition
Natural conversationalist

Standard instructions for information clerks. The following extracts from the manual of instruction issued by a well-known midwestern manufacturing company indicate the variety of matters with which the information clerk must be prepared to deal.[5]

The information desk is the first contact and sometimes the only contact that the outsider has with the company, and it is essential therefore that our visitors receive careful consideration. If some department appears to be careless in the length of time it requires visitors to wait, this should be reported to your superior.

[4] *Duties and Qualifications of Reception Clerks,* Policyholders Service Bureau, Metropolitan Life Insurance Company.

[5] *Ibid.*

Securing Necessary Information from Callers

1. Visitors wishing to contact individuals, regardless of purpose, should give their name, company represented, and the nature of their business (if not clear on the business card) before being announced, by telephone.

As a rule when asked, "What company do you represent?" the caller will give it, or he will state the nature of his business, or he will say, "I am a personal friend," or, "I am calling on personal business." Should he tell you the latter, say: "Then Mr. A knows you?" (Many who say they are calling on personal business are not even known to the person whom they wish to see.) Should he then admit that he is not known to the man he wishes to see, ask him if he can give you the nature of the personal business and if not, then ask him if someone has sent or recommended him.

If the caller gives a reason or indicates that he has been recommended by someone to see the person upon whom he is calling, then announce him. When he refuses to give any information, tell him: "I cannot announce you unless I may give Mr. A. some information on what you wish to see him about." Should the caller still refuse, telephone the secretary of Mr. A, telling the facts. Act on the secretary's suggestion.

2. Farmers and dealers, as a rule, do not know whom to see. They will tell you, however, what they want. Announce them to the proper person.

3. Visitors calling on members of the Traffic Department are not announced. You should study the faces of those who call upon the Traffic Department so that you will remember those who may be traffic solicitors and who are to be passed on to the Traffic Department without the regular announcement.

4. Ask for the name and company connection of all men calling on anyone in the Engineering Department. Because of the arrangements made for announcement of visitors to the Engineering Department on the Engineering Floor, you may send such visitors to the Engineering Department after you have listed the caller's name and his company connection.

5. Insurance agents and book and magazine salesmen have often given trouble by slipping into the office and calling on people without being announced. If anyone calls this to your attention, or you see a person attempting to pass into the office, report the matter immediately to your superior. These solicitors should ask to be announced, and after seeing one person they should return to the information desk and ask to be announced to the next person. When you know a man has previously not done this, advise him tactfully of our rule. Should he still violate the rule of going through the office unannounced from desk to desk, report immediately to your superior. The rule is definitely that no one is permitted to call from desk to desk for any reason whatsoever unless given special permission. This is done only on very rare occasions, and even then a guide may be provided.

to the person to whom it is addressed. If a special delivery letter is addressed only to the company, it should be sent to the mailing division by special messenger. Packages addressed to an individual may be accepted. If they are addressed just to the company, they should be sent to the receiving desk.

Fill-in Work

Work may be assigned to the information clerk by her supervisor or his secretary. Work should not be accepted from anyone else, because misunderstandings may arise as to the order in which jobs are to be completed.

Relief Clerk at the Information Desk

The person relieving at the information desk should be as familiar with the work as the regular employee. The hours of relief are:

10:00 to 10:15
12:15 to 1:15
3:00 to 3:15

Visitors Desiring to Inspect Our Office and Plant

Any person or group wishing to be taken through the office or mill should be referred to the Personnel Department. If the visitor is a dealer or consumer interested in our products, it is advisable to consult with the sales manager (or his secretary) who is concerned. If the sales manager can do so, the visitor will be given special attention.

Donations

Persons asking for money or product donations should be referred to the Director of Personnel. If the donation requested is some product which is to be used at a church bazaar or similar festivity, the request should be referred to the General Sales Manager of the Cereal Department. No one is permitted to solicit employees for donations of any kind.

Beggars, Drunks, etc.

Visitors of this type may make trouble, hence when they come in one of the nearby men should be called who understands the situation and can handle it properly. In no instance should information clerks make personal donations—all beggars are to be dismissed at once.

Applicants for Positions

Persons applying for work on our sales force or in the office should be referred to the Personnel Department and sent immediately to the Personnel floor, where the Personnel Department information clerk will receive the visitor. If, in the judgment of the information clerk, the applicant is of a type who would not, under any circumstances, be considered for employment, the visitor should be told that we have no work for him and be dismissed courteously.

Telephone service. The provision of adequate telephone service is an extremely important member of the group of service functions for which the office manager is responsible. The proper administration of this function requires an understanding of telephone equipment and its application, the correct methods of switchboard operation and supervision, the importance of good telephone usage throughout the office, and the regulation of the employee's use of the telephone for personal reasons. The importance of an understanding of equipment is illustrated by the experience of American Type Founders, Inc., as related by Mr. Victor J. Olearo, Comptroller:[6]

Before expanding our services we had a two-operator board. All calls went through this board. The two operators worked full time, with a part-time relief operator. We then had only 115 inside extensions. There were 11 trunk lines. These facilities were adequate for our requirements at that time.

Within three months our machine-shop capacity hours increased 50 per cent. Since we had been on full-time day capacity, this increase required overtime and night shifts. It affected all the internal functional services, such as purchasing, receiving, and shipping. We were soon faced with the need to do something about our communications system and to do it quickly, because the system we had at that time was not adequate for the increased requirements. There was no sign at that time of any early abatement of our needs; rather, the prospect pointed to a continued expansion of our requirements.

Investigation of the situation indicated that there were four principal courses open to us:

First: We could add another section to our two-board equipment. This would require relocation of the existing facilities and rearrangement of the reception desk. This additional section would put our installation in the bracket requiring a five-year contract.

Second: We could add a separate board for the munitions plant. We would need an additional operator and, what was more important, we would have to set up a separate central number. That meant that we would require a series of tie lines from the main plant to the munitions plant, to take care of calls which would come through the main plant but were intended for the new plant. The telephone listing of the American Type Founders made no distinction between its manufacturing departments; and, as the listing of the new plant would not be made public soon enough, a great many misdirected calls intended for that plant would have to be shuttled over.

Third: We could install a so-called PBX system, which permits the direct dialing of intra-plant calls. This would require a complete change-

[6] Olearo, V. J., "Expanding Communication Service," *Office Management Series* No. 96, American Management Association, 1941, p. 45.

over of the system. However, this system would need only a two-board arrangement and two operators. It required a five-year contract as did the first course.

Fourth: We could install a private system which would be parallel with our own. We soon discarded this idea because it would necessitate the outright purchase of equipment and also would mean having two telephones on desks where we now have one. To have two or three phones ringing at the same time and not know which is which is confusing and inefficient.

Cost was an important consideration. While we wanted to provide an adequate system, we also wished to avoid increased costs. We estimated that the first course (adding an extra board) and the second course (adding the separate switchboard at the new plant) would cost at that time about $100 more than changing over our existing system to the inside PBX dial system. The cost of the private system was prohibitive. We therefore decided in favor of the PBX arrangement.

It took about three months to change over to this system. We had to provide a space for the installation of the power plant required. The cost of this installation was not great when spread over the five-year period. It will average out something like $8 a month.

With this new system we are now operating 200 intra-plant extensions as against 115 extensions a year ago. We are handling 15 trunk lines, against 11 a year ago. We have two operators, and no additional relief operator is necessary. With any one of the alternative systems we would now be employing four or five full-time operators.

The office manager often must solve such problems of communication, and a knowledge of telephone equipment available, from switchboard arrangements down to instrument combinations, permits him to suggest solutions to the problems of other departments. The local telephone company office will provide any necessary engineering advice, free of charge.

An understanding of the methods of switchboard operation and supervision is helpful so that he might control, through the supervisor, the work of the telephone operators. Many large companies issue manuals of instruction to the telephone operators, thus assuring that the fundamentals of courteous, efficient service are observed. In addition, the telephone company will, at the request of the office manager, monitor the switchboard periodically and report to him and to the supervisor of operators the results of its study of switchboard practices. Such reports are helpful in the training of operators. In addition, they point out bad practices in telephone usage throughout the organization and indicate where the office manager should educate the clerical help in this respect.

Employees' personal telephone calls. The problem of handling

employees' personal calls is always a difficult one. Some companies are strict, while others are lenient. In a number of large concerns subordinate employees are not permitted to be called to the telephone on personal matters during office hours, except on special occasions. Other companies have no such hard-and-fast rule, but leave the matter to the discretion and regulation of the individual department head. It would seem, especially in the case of outgoing calls and other calls for which the company is charged, that some restriction should be imposed. This is especially true if the telephone company is willing to provide pay telephone booths at convenient locations in the building. In practice, of course, no regulation in respect to this matter can ever be fully enforced, since employees have ways whereby personal or social matters may be made to appear as necessary emergencies. The plan whereby employees are allowed to use the regular telephone service for personal calls, but for which they pay, telling the operator whether the call is personal or business, has much to commend it.

The Office Management Association of Chicago made a survey of the use and abuse of the telephone.[7] The following information is of interest:

In 33 offices, company telephones may be used for other than business calls. Of these, 12 companies provide pay telephones for employees' personal use, while 21 do not. Ten restrict company telephones to business calls, while two offices did not reply to this question. Of the 10 companies not permitting personal calls on company telephones, 8 provide pay telephones for their employees and 2 do not.

Twenty-eight of the 45 reporting offices impose limitations on the use of telephones for long distance calls. Nine require written approvals for making such calls, and 1 requires verbal approval.

Duplicating services. One of the important functions of the office service department in many companies consists of performing duplicating service for the entire organization. Duplicating methods and the more usual kinds of equipment used have been decribed in Chapter 6. The organization of the activity and the control of production are not unlike the methods previously outlined in connection with stenographic service in Chapter 8.

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[7] "Company Telephone Policy," *The Management Review*, American Management Association, April, 1945, p. 129.

The office manager should receive daily reports showing the amount of work received, amount completed, amount remaining on hand with requested date of completion for each job, department for which work was done, and any other data that the practical requirements of the situation may show to be important.

One problem which arises in connection with duplicating work concerns the demands sometimes made on the department for rush service. There are occasions, of course, on which the promptest possible service is needed and must be given. It has been the author's experience, however, that the "special rush" requests are not infrequently directly traceable to poor planning and organization of the job by the department in which it originated. One practical method that has been found useful in reducing unnecessary rush work is for the office manager to see that all departments are thoroughly familiar with the production time required for all kinds of jobs which the duplicating department ordinarily handles. The time required to do mimeograph work, for example, depends on the number of stencils to be cut and the number of copies of each which are to be run. Standard time allowances for jobs of various kinds should be prepared, and no work that specifies delivery in a shorter time should be accepted without the personal approval of the office manager.

Stationery and office-supply stock room. The storage and issuance of office supplies is one of the service duties of the office manager that does not always receive the consideration it deserves. Too often confusion and disorder, rather than order and neatness, typify the stationery stock room.

In the first place, a definite space should be set aside for the storage of office supplies. This space should be enclosed on all sides and entrance to it should be through a door to which, incidentally, there should be not too many keys. The space selected for the storage room should be that which is the least desirable for clerical work from the standpoint of natural light and ventilation. At the same time the location must be fairly central and convenient.

In the small office there is usually one stock room, while in larger offices departmental stock rooms are sometimes provided. The amount of space needed depends largely upon the policy followed by the particular company in buying supplies. The tendency is very distinctly in the direction of more frequent purchases of a smaller number of units per order. Care, however, must be

makes the proper new entry in the line below. In this way one may ascertain at a glance the amount on hand at any given time.

It is to be noted, however, that the use of the bin-tag plan does not give as full and complete information as does the stock record. One cannot tell by looking at the tag, for example, whether more supplies have been ordered, nor to whom or to what department the supplies have been issued. Moreover, the use of a stock record makes it easy for anyone who is unfamiliar with the location of the supplies in the stock room to find the items by simply referring to aisle and bin number given on the heading of the stock record.

Still another plan which is sometimes used, not so much for keeping a record of amounts on hand as for the purpose of being certain that the stock clerk notifies the purchasing department when the supply on hand of any given item is running low, is to tie a tag on a package—which, of course, is to be used last—so that it necessarily will come to the attention of the stock clerk when it is being opened. On the tag are printed instructions, such as, "Before opening, notify the purchasing department that the order point has been reached on this article." If desired, this tag may have the name and symbol number of the item written on it. In this case the supply clerk need only tear the tag off and send it to the purchasing department.

Issuance of office supplies. In practically all well-managed offices only designated persons are allowed to enter the office-supply stock rooms. The establishment of a rule of this kind not only avoids the temptation of the office employee to take a greater quantity of supplies than the requisition calls for, but makes it possible more definitely to place the responsibility for inventory shortages, appearance of the stock room, and so on.

In some offices the practice is to have each employee who requires office supplies of any nature fill out a requisition for what is needed and give it to his immediate superior. These individual requisitions are periodically accumulated and filled, and the supplies given to the individuals requesting them. In some cases, particularly where the organization is large enough to justify the existence of a sub-supply room in each main department, requisitions are filled every day. In this case, however, the departmental supply room carries only the more usual items, such as stationery, pencils, pens, erasers, clips, and so on. This supply, in turn, is replenished periodically from the general supply room.

Various attempts have been made to work out a practical plan

whereby the amount of supplies issued to any one clerk may be definitely controlled. Some companies, for example, have invested in mechanical pencils for all office employees. A stock of lead fillers is kept on hand. Each clerk is told that she will be held responsible for the pencil. Another company requires every stenographer to show her old notebook before being allowed to draw another. Still another company allows each clerk six pencils and one ink eraser a year. Frankly, the writer is not in entire sympathy with such methods. Theoretically it may be possible to save something in office supplies by the adoption of such strict methods of control. On the other hand, observation, experience, and faith in human nature indicate that a great majority of office employees are honest and not intentionally wasteful. Perfection is not attainable under any circumstances, and it is seriously to be questioned whether a method of issuing office supplies that suggests too economical a policy does not do more harm than good.

The use of obsolete paper and forms. In every organization there is a certain amount of mimeographed, multigraphed, or printed matter which, for one reason or another, is no longer of value. A number of concerns cut this up into convenient sizes and make pads of scrap paper out of it. Regular printed memo pads are necessary for certain classes of work, but there are countless occasions when just a piece of paper of any kind is needed for making a notation or doing a bit of figuring. For such purposes the back of the obsolete multigraphed questionnaire or form letter, made up in blocks or pads, is quite good enough. A saving such as this may seem small, and it is, if one is considering only a single pad. In the aggregate, throughout the year, however, the smaller number of regular memo pads used will more than offset the small cost of making up the scrap pads.

Inventory of office furniture and equipment. In the small and medium sized company the control and disposition of office furniture and equipment is not a matter of great importance. Purchases are made infrequently, and the number of pieces on hand is not so large as to require a numbering and inventory system.

In large organizations, however, the control and disposition of furniture and equipment is usually one of the responsibilities of the general service section. In such cases the common practice is to number each piece and maintain a complete and detailed record of its location. Whenever furniture or equipment is moved, the necessary changes are made in the records. When purchases of

additional equipment are requested, a check is first made to determine whether the required piece is available somewhere in the company, either in a department or in the furniture stock room. By maintaining complete records, it is often possible to supply the needed equipment without purchasing it. Such a plan is but another example of the many ways in which the progressive office manager can effect economies for his company, thereby helping to establish more firmly in the minds of the chief executives the fact that the office is a productive department.

10

Office Management in the Order Department

In the preceding chapters attention has been centered largely on the physical and service factors of office management, including the selection and layout of the office, equipment, appliances, and the filing, stenographic, and general services. All these activities are an essential part of office management. Together they comprise a group of responsibilities to which the office manager necessarily devotes a considerable share of his time. In an increasing number of cases, however, the office manager, in addition to his service responsibilities, is concerned in his functional capacity as supervisor of office methods with the office work of the business and operating departments. For this reason, this and the next four chapters are devoted to a discussion of the office work of those departments that are common to all kinds of business. In each case the principles and basic methods of operation are first stated briefly; then the methods and procedures used by a number of representative companies are described.

form its function before other sections can do their part. Time lost in the order department can result only in delay on the part of all departments whose work is to follow. Moreover, mistakes made at this first operation—translation of customers' orders into operating instructions—are unlikely to be noticed until after the completion of the job, with resulting complaints and difficulties. Time and accuracy are therefore essential characteristics of a sound order procedure.

More specifically, "an efficient order system should furnish a record of the purchaser's name and address and give complete shipping instructions. It must furnish a sufficient number of copies for each department interested in the transaction. It must expedite the posting of an order to the purchaser's account. It must necessitate as few written additions as possible, and a minimum of clerical help. It must also take care of the preparation of invoices and the writing of labels, tags, or other shipping materials, and it should furnish records for the statistical and production departments." [1]

Order department routine. The exact sequence of operations in a specific order department will depend upon a number of factors, all of which may vary between one company and another, depending upon the nature of the business. Most of the following steps are common to all order department routines:

Order is received and interpreted. Customers' orders arrive in each delivery of incoming mail and, after being opened by the mail room, are delivered to the sales department. They are routed to the proper product division and are reviewed carefully to make certain that all the information needed to prepare a house order form is included. In some cases descriptions of articles are enlarged, stock numbers of products are added, if missing, prices and price change clauses are checked, and terms and conditions are noted. If any doubt exists as to precisely what the customer wants, his order is generally routed back to the salesman or a representative who will question the customer to make certain what is wanted.

Credit is approved. In some companies this function is performed prior to interpreting the customer's order, in which case all incoming orders are routed through the credit department before delivery to the sales department. This is generally true when products are standard and there is seldom any doubt about quantities and prices as the customer lists them. In most cases, however,

[1] The Dartnell Corporation, Report No. 298.

In many business concerns, the problem of back orders, which comprise items the company was unable to ship because they were out of stock when the original order was received, is very important. There are various methods for handling back order procedure, one of which is discussed in the illustration following this discussion.

Invoicing. Billing the customer for the material shipped involves the pricing of the item shipped, the extension of this pricing (the multiplication of the quantity and the unit price), the totaling of the amount of the order, and the addition of any extras, such as shipping charges, normal trade extras, and so forth, which may be involved.

As explained previously, quite often the order is priced, extended, and the total amount, including extras, calculated at the time the order is originally written. This is done, when possible, so that it will not be necessary to rewrite the entire transaction in order to produce an invoice. The invoice is merely an additional copy of the order and is held in a pending file until such time as the shipping department notifies the invoicing unit that the order has been shipped to the customer. When this occurs, the invoice is pulled from the file, mailed, and the necessary accounting records made.

In those cases where the customer's invoice is not a copy of the original order, the invoice is prepared upon receipt of the copy of the order from the shipping department. The order is priced, the extensions made and checked, after which the completed invoice is checked for accuracy. As before, the customer's copy is mailed to him and the proper accounting records are then created.

The ordering and invoicing procedure presents an opportunity for a great deal of study and refinement. It is a process in which many of the basic elements of office management are present. Moreover, it generally is a highly repetitive procedure in which units of work can be measured quite accurately. Consequently, this operation can be planned, scheduled, and controlled within rather close limits. Unit costs for the operation can be calculated, and quite often worthwhile savings can be made. A wide variety of machines and systems applicable to the order and billing procedure are available. The main purpose of them all is to do this job more quickly, so that the customer may receive the fastest possible service; more accurately, so that the customer's service will be of the highest quality; and more economically, so that the

office costs in connection with the distribution of the product may be reduced to a minimum.

Order and invoicing procedure of a manufacturing company. The order and invoicing procedure of the service department of The Timken-Detroit Axle Company is an illustration of a well-planned order system.[2]

The Timken-Detroit Axle Company manufactures most of its own parts and buys others from various vendors. The service department handles nearly 20,000 individual items and parts are brought in and shipped every hour of the day. When a shipping order is sent to the material clerks and they find a given part on the order is not available at the moment, that part is immediately back ordered.

An hour or so later, a quantity of the part may be received and the back order filled. In such case. there is no actual delay in shipping and the customer doesn't even know the part was back ordered. But the procedure in the service department is the same as if the delay had been one of weeks or even months.

On the other hand. a quantity of that part might not be received for a long while, and orders for it would accumulate. When a quantity is received, it might not be sufficient to fill all customers' back orders. When this occurs the quantity should, of course, be allocated equitably.

When customers' purchase orders are received, they are assigned shipper numbers and sent to a master control file. In this department specifications, prices, extensions, and any other information which may be necessary before typing are added.

They are passed on to the typing department where a group of typists, using electric typewriters equipped with Hectowriters, type a Ditto master copy of each order.

The master copies are checked for accuracy and passed across an aisle to a battery of Ditto duplicators. These duplicators are equipped with adjustable tables for reproducing all or any part of the information on the masters. Here, all shipping copies and all invoice copies—a total of nine—are first duplicated. Then the operator masks all except the shipping directions on the master copy and runs the shipping and billing tickets.

A customer's purchase order usually lists 1 to 40 or more items, but a separate set of tickets is run for each item. There are four tickets, of different colors, in each set: An identification ticket (white); packing ticket (yellow); shipping ticket (pink); and back-order ticket (blue). Each set of tickets is clipped together and sorted in sequence by part numbers.

Copies of the full order are sorted and the shipping tickets sent to a

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[2] French, R. G., "Down Goes Order Processing Cost," *American Business*, May, 1946, p. 12

checking desk for verification. The accounting department's other copies are forwarded to it and are filed by shipper number to await notice of shipment.

Materials record clerks fill in on each ticket the number of pieces to be shipped and the stock location of each part. If the records show that none, or an insufficient quantity, of a given item listed is available at the moment, the blue (back-order) card is posted and placed in a back-order file. Other tickets remain in the file until the bookkeeping machine operators have posted the records.

Shipping tickets are then sent to a file where clerks in the billing department sort them by customers and order numbers. They pull the master copy, the accounting department shipping copy and the order department copy and enter on the copies the quantity of pieces to be shipped, and date the orders to show the day on which tickets were sent to the stockrooms. These orders are placed in an open billing file to await receipt of shipping information.

If there is more than one item on a shipper, as is usually the case, tickets are numbered to indicate the number and sequence of tickets—i.e., 1 of 5, 2 of 5, etc.

All tickets then are sent to the stockrooms where they are put in cellophane envelopes to keep them clean. Stockroom employees assemble the items. Tickets are arranged in the same order as the bins in the stockrooms, so attendants have only to collect the items in the order indicated. They attach the identification cards to the parts and the packing tickets are placed in the boxes. The parts then are sent to the shipping room. The shipping clerks check them and fill out the shipping ticket, entering the weight, bill of lading number, routing, date shipped, etc., and return it to the service department.

On receipt of the shipping ticket properly filled in, the service department transcribes the shipping information on the accounting department's shipping copy and on the order department's copy of the full order and forwards the accounting department's copy to it. The latter department pulls its invoice copies, fills in the shipping information and bills the customer. Meanwhile, the order department copy is similarly filled in and sent to a service file where it is matched with the customer's original purchase order and filed as a permanent record.

Under the former system, when a back order was necessary, the master copy of the full order had to be retyped entirely and duplicated, as described above. Under the present procedure, a "variable master" strip, 2 inches wide, is placed on the left-hand margin of the original master copy. The original shipper number, date back ordered, and the new shipper number are typed on it through a Ditto carbon. Copies are duplicated as before, but no new tickets are required. The back order is held until the next shipment to that customer, when it is pulled and included with the new order. Using this variable master strip effects a major saving of time in typing masters.

As quantities of parts on back order are received, the back orders are

pulled and filled. If the quantity is insufficient to fill all back orders, the available supply is equitably allocated among all customers who have been waiting for the parts.

While the greatest advantage of this system probably is in handling of back orders, the procedure also has other advantages. The most important of these is that tickets are duplicated and held until they are ready to accumulate all stock available for the shipment. Thus, tickets, rather than stock, are accumulated.

Shipments usually are made to designated customers on certain days of the week. All of the stock is accumulated at that time, instead of being accumulated and stored a little at a time. Then too, it is desirable to attach a separate identification ticket to each part and to furnish a separate packing ticket for each part in a box. This plan provides the necessary tickets.

At the time the present parts order control system was installed, new duplicating equipment was also acquired to replace the gelatin type duplicators formerly used. As a result of the two improvements, cost of order processing was cut approximately 50 per cent.

More important, management insists, is the better service it is able to render customers.

Speedy service to customers is an important factor in good customer relations. The above plan, it should be noted, stresses this service feature, in addition to accuracy, the elimination of double and triple writing of the same information, and the lowering of the cost of order and billing work.

Billing procedure at Grove Laboratories, Inc. The following example serves to show how good order and billing procedure affects the operation of other functions of a business, in addition to reducing order costs and speeding up service.[3]

The accounting system at Grove Laboratories, Inc. was designed to handle all billing and to segregate product sales by territories and marketing areas. The time saved on these operations was approximately 62½ per cent. Broken down to separate operations the savings are:

1. Fifteen man-hours saved daily in billing, which has reduced overtime in that department.
2. Tabulating daily sales distribution, savings of more than 70 per cent.
3. Keeping records of future orders, savings of more than 90 per cent.

Since its adoption there is a noticeable improvement in office efficiency. Operations in the general filing department have been speeded up considerably. The credit department finds it can give better service in checking orders, which shows how the system reflects efficiency to other departments, although not directly connected with them.

[3] Lawson, A. T., "Billing and Sales Analysis." *American Business*, August, 1945, p. 14.

An index of customers is maintained by trade classifications. One tabulating card is punched to show the customer name, another his street address, and one for his city and state. The customer name card contains his code number, salesman's territory number and the marketing area number. These three cards as well as all product cards show the same punch operations from column 61 to the extreme right. The small columns are for punching all fixed data concerning an individual account, making it possible to check any information desired. Product cards need no other customer identification than the punched code number. The punched slots at the upper left of product cards identify customer and all other needed information. If, by error, product cards should become mixed with those of other customers the whole lot can be placed in the assorting machine, set for any code number desired, and they are separated automatically.

Files of product cards show an assortment of quantities ranging from 1/12 dozen to 1,200 dozen. If any quantity card in excess of 1,200 dozen is required, a combination of cards is pulled. On receipt of an order, the particular name, street and city cards are pulled along with the required product cards for the quantities specified in the order. After cards are pulled and verified for accuracy, the complete order is placed in the printing machine for invoicing.

All coded information in the customer name card is transferred automatically by gang punch operation, through the use of a reproducer unit, directly into the product cards. These completed product cards then become a source of statistical break-down for all vital information required in making a quick analysis. Here the sales department can find the answer to a selling problem for any individual account or for any given territory within a few minutes. These completed product cards are used in keeping an accurate control over advertising expenditures and to direct special effort to any part of the country on any product which needs special sales effort.

Should it be desired to learn how B complex Vitamins are selling in certain types of stores in Cook County, a card run is made on that particular class on all 037's in that area. The complete picture is ready for action in a few minutes.

Under the old system, billing operations required two full-time operators of 8 hours each, plus overtime at certain periods. Now customer invoicing requires only a 3-hour period, thus leaving the battery equipment open 5 hours for statistical runs and other punch card performances. At the same time and within this 3-hour period about 25 per cent more orders can be billed than formerly.

Five girls were formerly employed in the distribution of product sales and accumulation of sales data by marketing areas, city and state allocations, etc. This made a total of seven persons required to handle these operations and those in the billing department. Now the man in charge assisted by four girls does all this work.

The company always used a daily accumulation of sales to ascertain its sales position compared to a year ago to reflect increase or decrease.

To obtain this information under the manual method required 3 hours daily for one clerk to complete the tabulation. Now the job is done in 45 minutes, saving about 70 per cent in time.

Stock control was one phase of the business that used to cause a lot of trouble. There was always a lag of several days in keeping accurate check on the movement of goods. It often occurred that the last check showed a stock of several thousand dozen of an item on hand. But checks were not always current and before it could be counted again, the stock would be depleted and filling orders would have to be delayed until the item was restocked. By making a run of product cards for any item of shipped goods during any past specified period of days, the inventory can be determined within an hour or two. Then the daily movement record of finished goods yields a closer control over stock at the main plant and in the warehouses.

Keeping complete control of large quantities of future orders and the many products ordered was a difficult problem since new orders were added from day to day and others were shipped. With the method of punch cards a current file for such futures with punched cards is maintained. As shipments are made, the cards are removed and it is very easy to make a card run for various products to determine the quantities of each to be shipped over the future order period. In some cases, future orders are scheduled for shipment three or four months ahead.

It formerly took the full time of one clerk in the credit department to keep these future records. Today, a complete check on the future status can be had in 30 minutes to a maximum of 3 hours, depending on the quantity of orders in file. It should be noted here that these future card runs are not made regularly under this system, but only when it is deemed necessary. This application of the system means that on this one operation the company saves more than 90 per cent of the time formerly required.

This factor of control is greatly simplified in that each operation upon completion can be rechecked for accuracy and tied into control figures.

A double check is kept on back orders which carry the same number as that used on the original invoice. This number is printed on the invoice when the back order is billed so as to give a cross reference. Now that stock control is kept up to date the number of back orders has been reduced, which not only permits better service to customers but saves labor.

The company uses a quadruplicate invoice: (1) Customer copy; (2) shipping department copy—on the reverse side of this sheet is listed all information pertaining to shipment, such as number of cases, B/L data, routing, etc.; (3) accounting department copy; (4) transportation—on this sheet is kept a record of shipping procedure, such as freight expenses, etc., in a loose-leaf file.

Order department procedure in a mail-order house. The following paragraphs describe the methods of handling orders in a large mail-order company.

All incoming mail is sent directly to the in-mail department. Letters are opened by an ordinary letter-opening machine which, in addition, stamps each letter with the date and the mail number. Each delivery is given a number. The letters are then marked—for example, 1–2–47–2, which means the second mail received on January 2, 1947. Along the entire side of the mail room is a sorting board, which is low enough so that the girls can sit down on stools of ordinary height while at work. In the middle of this table-like arrangement there are two rubber belt conveyors, one about eight inches above the other. Since this conveyor system is in the center of the sorting board, the girls can work on each side of it.

The orders are sent through in accordance with a carefully planned schedule, which, however, varies with the number of orders received. In the sorting of the mail, the orders are sorted out and put on the upper of the two conveyors, while all other correspondence is put on the lower one. The orders go along the conveyor to the end of the sorting board to a table. At the sorting board the orders are pinned on order forms, on each of which is a number. At the table the orders are marked with the amounts, after which they are checked and added. The cashier's department takes care of all money orders and checks, as well as currency.

The orders next reach the stenciling department. This department has two main divisions. The first consists of the files, containing a stencil for every person who has ever ordered from the firm previously, and the other is a group of stenciling machines on which stencils for all new customers are made. A record is kept for each individual customer, and all his transactions and other relations with the company are recorded. These files are arranged alphabetically as well as by states and localities, and contain approximately two and one-half million stencils. The order form is stenciled, as is the gummed label which is to go on the package.

From the stencil department the orders go to the order-typing department. In this department the order is typed on a duplicate form. If more than one item is ordered, a separate sheet is typed for each one. On this sheet appears the history of the order. M 10:20 A 12, for example, means that the order is scheduled to leave Monday at 10:20, and that it is to go to section A, in the assembly department, and to bin 12. The order form goes to the bin, so that when the time comes to send the order out the items may be checked against the order to see that it is complete. The

individual item sheets are sent through pneumatic tubes to the departments for which they are intended. All orders are scheduled to leave the house within twenty-four hours after they are received.

The orders next go down to a desk in each stock room or merchandise floor, as it is called, where the clerk goes to the shelves and selects the article called for by the order sheet. The clerk puts the article along with the order sheet on a table on one side of the room. Another clerk then takes the various articles and sends them down a large chute which connects the merchandise floors with the assembly floor. On a platform just above the assembly floor the articles are sorted into sections. Sections A. B, C, and so on, are for combination orders, and another section for single orders. The sections are further subdivided by ten-minute periods and by hours. The orders are then sorted into these ten-minute periods according to the time schedule stamped on them. When the articles come to the various sections from the sorters on the platform, they are dropped into the appropriate hopper. At the bottom of the hoppers is a long sorting board. Here each article is put into its individual bin. Before the merchandise is shipped, it is checked with the order, which has also been put into the bin. If the check shows the order to be complete, it is wrapped up and the gummed, stenciled label is stuck on. The orders then are sent to the shipping room, in which is a substation of the U. S. Post Office. The orders are put into regular mail sacks, and they go out in this form.

Analyzing the work of the order department. The foregoing illustrations indicate the many possibilities for service which exist in good order-handling procedure. The advantages described were achieved only after a great deal of study and planning on the part of each of the companies mentioned. The following check list will suggest some of the points to be questioned when existing order routines are to be examined, and on the basis of the facts uncovered by the examination improvements will suggest themselves.[4]

How many clerical operations are used in recording, filling and billing each order?

Are there standard instructions that explain, in detail, the proper way to prepare and handle orders and are these instructions used by the employees?

How are peak loads handled?

[4] Pierce, J. F., "Is Your Order Department Ready for Business?" *The Office*, March, 1946, p. 50.

What percentage of orders are received by mail? by telephone? from salesmen? from other sources?

Are order writers assigned to other duties?

Are orders proofread before leaving the order department?

Is any part of the order recopied?

What are the types of orders received?

Where do delays occur in handling orders?

Does the work pile up when a clerk is absent?

Are unnecessary copies of the order being written?

How many times is the same information written on the order, on the shipping forms and on the invoice?

What do the salesmen think of the present order-writing system?

What do customers think when they receive acknowledgment of their order and the invoice?

What writing method best meets the needs? (Single sheets or padded forms? Pads with interleaved carbon? Continuous multi-copy forms with interleaved carbon? Duplicating machine-stencil, spirit, gelatine, offset, or photocopy process?) The method of writing an order determines the answers to many questions. Each order-writing procedure must be studied and analyzed before the proper machine can be selected.

Important factors that are present in every well planned and well executed order-writing system are: accuracy in transcribing all information to all forms needed to complete the transaction; accuracy in reading the information; accuracy in preparing the items for shipment; accuracy in shipping the items.

To improve an order-writing system every copy of the order must be legible. Whenever possible, reduce the number of forms and thereby reduce the number of re-writings of repetitive information. Use the most efficient order-writing method. Have the forms properly designed. Allow the minimum time for routing the forms through all departments. Keep adequate records which show how much it costs to handle and invoice an order and the time required to complete the entire transaction.

11

Office Management in the Sales Department

The main objective of the sales department is the marketing of the company's product at a price which will permit a profit and in the quantities necessary to assure steady, high-level production at low unit costs. The fulfillment of this objective requires attention to at least two functions: the creation of demand and the direction and control of the sales force. The following chapter will deal with the former function. Our present concern is with the role of office management in the direction and control of the efforts of the salesmen. Lowered margins of profit, increased competition, and other equally important developments have made it essential that the most careful attention be given to the development of efficient methods of sales management.

Reliance of the sales department upon records and reports. Records and reports constitute the primary means whereby the sales manager and the sales department at the home office keep in touch with salesmen and customers. The sales manager, through a system of daily, weekly, and monthly reports sent to him by his representatives in the field, exercises control and renders decisions almost entirely by means of these documents. In fact, so easy is it to manage the sales force in this way that there is a very real danger of its being carried too far. Of necessity, however, the sales manager depends to a considerable extent upon reports of others for his information about conditions in the sales field.

Organization of the sales department. Lack of space prevents more than brief reference being made to ways in which sales activities may be organized. All firms take into consideration, to a considerable extent, the geographical division of the sales territory. Some have district sales managers, each of whom is in charge of a specified territory and all of whom usually report directly to the sales manager. Other concerns, in addition to the geographical basis of exercising sales control, emphasize the various items or

products in the line through the designation of certain individuals as product managers. Each of the product managers devotes his entire time to developing the sale of his particular product, no matter in what geographical area it may be sold. Still other companies establish selling agencies in different parts of the country and appoint local agents as their direct representatives. In addition to these methods, there is the type of organization commonly used in the retail business and to a considerable extent also in the wholesale field, in which the buying and selling functions are combined and referred to as merchandising.

Obviously the exact nature of the sales records and reports needed depends to a considerable extent upon the kind of sales-organization structure under which the company is operating. In practically all cases, however, there are certain fundamental records which it is absolutely essential to keep.

Prospect records. Two important functions of the sales department are to supply leads to salesmen and to see that prospects are properly followed up. The essentials of a practical prospect-file and follow-up system are that the plan work automatically and that it provide for a definite check on results.

One method is to make a lead slip in duplicate for each inquiry received, whether by mail or telephone. One copy is sent to the salesman, the other is kept for the company's prospect files. This slip should contain such information as:

1. Name of customer or prospect.
2. Inquirer's name, initials, and title.
3. Full address.
4. Date inquiry was received.
5. Nature of the company's business.
6. Origin of contact (mail, telephone, visit, and so on).
7. What did the inquirer want to know?

The salesman uses his copy of the lead slip to plan his call and develop the sale. The sales department's copy is placed in a follow-up file, which will bring it to the attention of the sales manager should the salesman fail to follow the prospect or fail to report his progress. A lead slip is illustrated in Figure 31.

Salesmen's reports. One of the primary interests of every sales manager is the amount of business which his representatives in the field are securing. Consequently, one of the fundamental

records of the sales department is the salesman's report, which shows specifically and in detail just what each salesman is doing. Practice varies as to the particular method of securing this information from the salesmen. Some companies require a daily report from each salesman containing the names of customers and prospects visited, the results secured, and so on. Other concerns ask that this same information be submitted weekly rather than daily. Still other firms supply their salesmen with customers' record cards, one card for each customer, and ask that the salesmen note the results of their visits on these cards and send them to the office as the calls are made. In other cases the daily or weekly expenses of the salesmen are shown in designated columns on the same form on which the reports of calls are entered. The items commonly found on salesmen's reports are:

1. Name of customer or prospect.
2. Buyer's name, initials and title.
3. Full address.
4. Date of call.
5. Consumption capacity.
6. Competitive conditions.
7. Basis of competition.
8. Price quoted.
9. Orders.
10. Suggested follow-up.
11. When next call should be made.

Whatever details the report may contain, the primary object of the salesmen's reports is to give the sales manager a specific and rather detailed report on each customer or prospect. Ample space should be left for the insertion of any information about the customer's or prospect's present or future business or plans that will be of practical usefulness to the sales department. Under this heading might be such a notation as, "Does not need any more office equipment now but is planning to open a branch office at Albany, N. Y., about April 1, and will be in the market for a complete set of furnishings for it sometime during the first part of March."

Customer's record card. The sales manager must know at all times how much business his firm is doing with each customer. For this reason he keeps in the sales office a customer's record card, a separate card, of course, being maintained for each customer,

on which are noted all transactions with the customer. Such information as order number, date of order, itemized account of what was ordered, value of order, date of shipment, complaints, if any, by the customer, and so on, is entered on this record. The customer's card serves as a complete record of the firm's transactions with him from a sales standpoint. These cards are usually filed alphabetically by customers, but they also may be subdivided and filed geographically. Figure 23 illustrates such a record.

Name			Business			
Address			Salesman			
Date of Sale	Order Number	Kind of Goods Sold	$ Value of Order	Total Sales to date this year	Total Sales Last Yr	Remarks

Fig. 23.—Customer's Record Card

Statistical records of sales. Complete, accurate, and up-to-date customers' record cards also serve as the basis upon which sales statistics are compiled. While it is not within the scope of this chapter to enter into an extended discussion of the use and value of sales statistics, it is in order at least to draw attention to the very great usefulness and practical value which the compilation of such data may have for a progressive sales manager. Classification of sales by items or products sold, by salesmen, by territories, by customers, and so on, will frequently show results that are truly surprising. For example, in an investigation of one company that made use of information secured from customer record cards in this way, an analysis of some 8,000 cards showed that approximately one-third of the customers bought in excess of $100 worth of merchandise; one-third, from $25 to $100 worth; and one-third, less than $25 worth in the course of a year. Tabulation of these same cards by the amount of sales, however, showed that over 95 per cent of the sales made were to customers who bought over $100 worth of goods per year. Further study along this same line brought out the fact that, although only 6 per cent of the customers bought more than $1,000 worth of goods yearly, nevertheless, this 6 per cent bought 85 per cent of all goods sold. The value of such information in planning sales compaigns and in systematizing efforts to reduce selling expenses by concentrating on the most profitable customers is obvious. Every sales manager should regard sales statistics, not as an evil to be avoided if possible, or at most to be put up with grudgingly, but rather as a means by which much valuable information may be secured.

Sales records used by Majestic Manufacturing Company.[1] The following example illustrates one method of maintaining sales records of customers' activity, salesmen's activity, and salesmen's expenses.

Majestic Manufacturing Company, St. Louis, maker of stoves and ranges, has installed a simple set of records that present a visual analytic picture of all sales activities. The new system was installed January 1, 1945, and the following results have been achieved:

1. Time of keeping records cut in half;
2. The handling of orders was speeded up;
3. Progress of customers may be seen at a glance;
4. A visible picture is given of each salesman's activities—his progress, his aggressiveness in conjunction with his training;
5. Cut in cost of distribution as results from salesman's training;
6. A noticeable improvement of the morale and efficiency of the office workers.

The complete set consists of one 4 by 8-inch "fold-over" sheet for the customer record, three 5 by 8-inch cards for salesman's records, and one 5 by 8-inch card showing activities of customer and salesman. All are reversible, providing space for several years' records. Figure 24 illustrates two of these records.

Customer record. Records are kept geographically by state. They are slipped into place alphabetically and fastened on a horizontal slide that fits a visible panel. The name of each account appears on the visible index at the bottom of the card. This record sheet is 4 by 8 inches, folded in the center and is reversible, providing four pages for records. These sheets are called "fold-over," because they fit over the salesman's activity card. They are thin, permitting as many as six to be used over the salesman's card before transferring them to dead files. On the salesman's card and flush with the customer fold-over sheet is space for information concerning quota of the different style ranges such as coal and wood, etc. There is a salesman's activity card for each account, which shows everything he did on each call, to afford a quick, fingertip checking of sales progress.

At the bottom of the visible index are celluloid movable signals. Left to right they are: A large orange signal indicates this store to be a group unit. If the account's credit is questionable a large red signal is placed here; if there should be a possibility of reopening an old account but an investigation is first required, a large black signal is shown. The small blue signal shows the month the salesman last called; a small orange signal, the month last order was received. The yearly quota is written in pencil on tab under "quota unit." Under "summary of sales"

[1] Lawson, A. T., "Fingertip Control of Sales Abolishes Guesswork," *American Business*, June, 1945, p. 14.

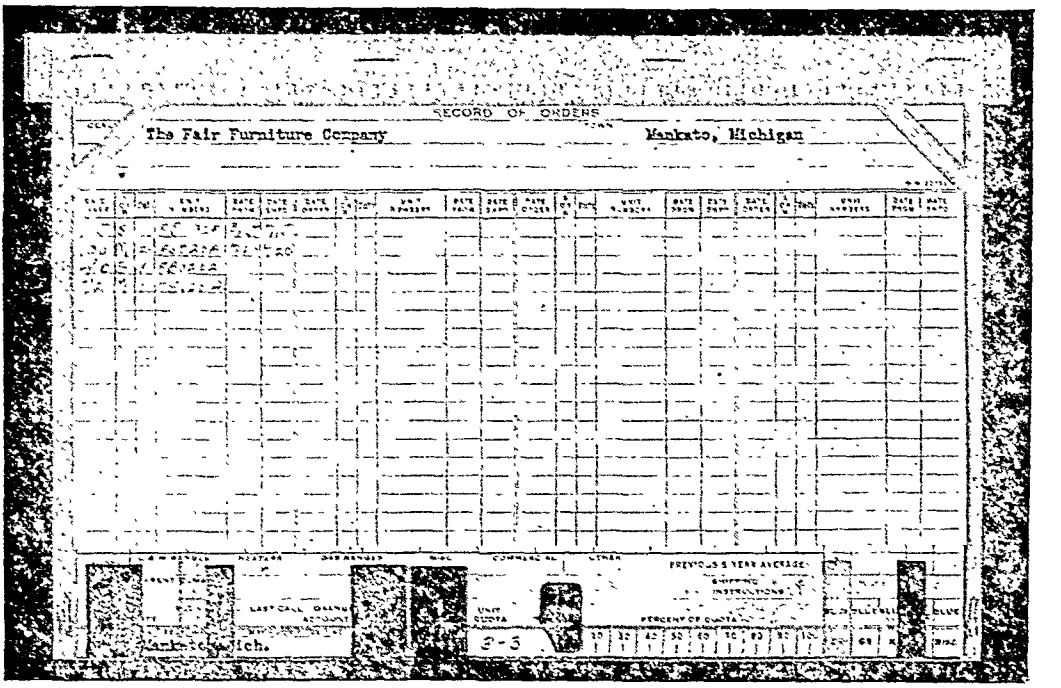

Fig. 24A.—The card shown above is part of a set of records which provide quick facts concerning sales to dealers, a sales summary, percentage of quota.

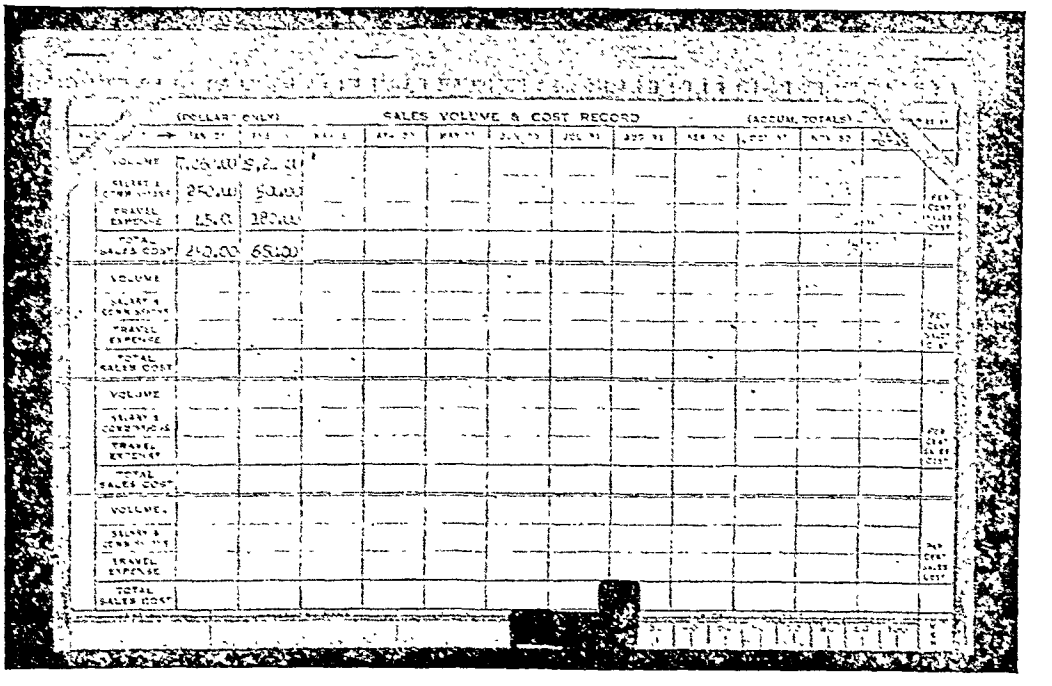

Fig. 24B.—This is the salesman's record card which carries a complete record of sales, commissions, travel expenses, total sales costs, and annual volume.

at the right, blue and orange signals indicate styles of stoves customer has been buying. The small figures at lower right show, by moving the orange slide, the percentage of quota filled.

Salesmen, training and record. Much attention is given to salesmen by Majestic. This starts with the salesmen's training and carries through with every detail, year in and year out. The policy is: "Salesmen produce the business that makes pay rolls possible; they make expansions necessary, and make it possible to look for new outlets. It is salesmen who keep factories running. With all other details of manufacturing a product functioning properly, the salesman who knows his duty and executes it with sincerity of purpose will make progress in the years that lie ahead."

Salesman's record. Other than the salesman's store activity card, there are three others to complete the set. Card number 1 provides for volume of sales by month, with space for several years' record. Under the volume column is salary and commissions by month, next is travel expense, then total sales cost. At the right is space for percentage of cost sales. Orange slide shows percentage of quota reached. Card number 2 has salesman's name, short history of him and his family, his wife's name, number of children; quota, volume produced, total selling cost, percentage of sales, total earnings, citations, remarks. Card number 3 provides a summary control for three years on each side, the number of days worked each month, authorized dealers called on, new accounts called on, new accounts sold, resale calls, service calls, mileage. The lower half of this card shows the accumulated totals of the different units sold.

Territorial records. Inasmuch as the sales representatives of most companies are more or less constantly on the road covering the territories that have been assigned to them, it is important that the sales office have records that will tell exactly not only what territory each salesman has, but also the exact or approximate location within the territory of the salesman on any given day. For the purpose of setting forth the location of different territories, the sales manager usually has on the wall of his office a rather large map on which the territories are clearly marked, either in ink or in colored crayon. In the center of each territory there may be placed a number. A simple code pasted in a lower corner of the map shows the name of the salesman covering each territory as numbered on the map. Sometimes, too, other information in regard to the territories, such as the sales quota for the year, the potential customer population of the territory, and so on, may be shown on the same map.

Salesmen's route cards. In order that the sales manager may have a record showing where each salesman is in a territory at any

given time, a simple report form showing the anticipated route of the salesman during a given period in the future, usually a week, often is used. This report may be sent in by the salesman each week with his report of calls and his expense account. On this report will be shown the salesman's name and below, in columnar form, the dates of the coming week, together with the name of the town and the hotel where he expects to be each day. The use of such a report enables the sales manager to get in touch easily and quickly with any of his men if the need arises. A copy of this same record is also sent to the mailing department to be used by it in sending mail to the salesmen on the road. Incidentally, such a report is useful to the sales manager in that it shows him at once whether his men are covering all the communities that they should visit, or whether, as is sometimes the case, especially where a lax system of sales control prevails, the men are going only to the larger towns and neglecting the smaller ones. Figure 25 shows a copy of this report.

Name			
Day	Date	City & State	Hotel
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Saturday			
Sunday			

Fig. 25.—Salesman's Weekly Route Card.

Salesmen's weekly expense accounts. The salesman's weekly expense account has already been referred to incidentally in a previous paragraph. The writer has yet to see two such records that are exactly alike. In general, however, the purpose of the expense account is to ascertain the total amount spent by the salesman and to classify this total by type of expense. Thus, there will be separate columns in which are entered the amounts spent for railroad fare, Pullman fare, excess baggage, and cartage charges (where salesmen carry sample trunks), for hotel bills, for meals, for auto hire, for miscellaneous items, and so on. Some companies ask that receipts or vouchers be submitted to substantiate certain items shown on the expense account. Figure 26 illustrates this record.

Item	Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Total	Remarks
Hotel									
Meals									
R.R. Fare									
Pullman fare									
Excess Bagg.									
Auto Hire									
Miscellaneous									
Total									

I certify that these expenses were incurred by me.

Salesmen

Reimbursed by check No. ____ Date ____ Approved Salesmanager Approved Auditor

Fig. 26.—Salesman's Expense Account.

Records of sales estimates and quotas. One important set of records of the sales department has to do with sales estimates, quotas, and budgets. Sales quotas are often based on more or less detailed market surveys or analyses. The translation of these figures into the final sales budget includes many necessary adjustments that must be made to suit the requirements or restrictions of the other departments of the business, such as production, finance, and so on. Setting sales quotas and making up the final sales budget constitute a problem too great and complex to be treated here. Even the records that are involved can be indicated only very briefly. The data upon which sales quotas are based should include an estimate, submitted by the salesman himself, regarding the sales possibilities in his territory. These figures must be totaled and analyzed by the district sales managers and reports, containing suggested quotas, must be sent to the general sales manager. On these reports a tentative sales estimate or statement of what the sales department thinks it can sell, in terms of volume and of value, during the coming period is prepared. These figures are then submitted to the various other departments of the business, after which they are revised before being finally approved. When this final approval is received the whole process is repeated in reverse order with a view to arriving at a definite quota for each salesman. During the period covered by the quota, frequent comparisons must be made between estimated sales and actual sales. Unforeseen conditions may arise—and in practice do arise with annoying persistency—which make it necessary to revise the quotas or estimates during the period. All of these activities require the making and the keeping of numerous records and reports by the sales department, as well as by other departments.

Sales quota record of Maremont Automotive Products, Inc. One method of keeping the records that contribute to the establishment of a sales budget is illustrated below.[2]

Maremont sales records contain information on 2,500 accounts in 22 territories covering all states and Canada with an annual sales volume that runs into millions of dollars. A visible card was designed which tells the story of every account from its contract number to its last dollar of monthly sales. This sales account card gives the picture of the sales records of dealers and territories by opening a single tray and glancing

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[2] Eastman, P., "Sales and Quotas at a Glance," *American Business*, April, 1946, p. 18.

at the visible margin of the cards. Through the use of a sliding insert, without raising a card, records reveal the percentage of sales of each account of the sales total of the previous year. Posting of monthly sales records is made with a minimum of effort and time, as this device automatically translates the current cumulative sales total into percentage of sales for the previous year. With all the cards signaled in this manner and grouped according to territories, the sales director can see which dealers, salesmen, towns, or states require attention.

In addition to cards for the 2,500 franchise dealers classified as ledger accounts, there are 900 cards for customers buying both spring and muffler items. These records also contain information on approximately 650 branches or jobbers supplied by a franchise dealer. Branches or jobbers have a card under their city index, for referring inquiries from consumers to the nearest Maremont dealer.

The upper left-hand corner of customer sales record cards contains information on the franchise dealer; to the right are listed branches and jobbers. Columns printed on both sides provide space for a 10-year record of monthly and cumulative sales. Information for all monthly sales totals is sent by the accounting department to an entry clerk who makes all entries and operates the sales analysis system.

The following information is entered on the sales record cards: A customer number is assigned to each account for identification and accounting purposes. The area covered by each of Maremont's 22 salesmen is indicated by a territory number. This is followed by the names of the buyer, sales manager, owner. A contract number is entered for all franchise dealers. Under the title "Catalog Number," code numbers represent the type of catalog and price lists supplied the dealer. Below this is the name of the manufacturer who formerly supplied this account.

Two credit ratings are recorded, one supplied by the Motor and Equipment Manufacturers Association, the other by Dun & Bradstreet. There are also two entries for direct-mail promotion. Services are available to dealers whereby literature is mailed to the dealers' customers at a service charge. In the right-hand corner of the card a record of sales promotion work is kept. This shows the period covered, amount sold, and initials of the person who did the sales promotion work. This sales work is done by a Maremont promotion man, other than the regular salesman, who works with the dealer's sales staff in promoting Maremont items.

Sales figures for each month and the date of the latest sales call are recorded. Sales volume is carried on a cumulative sales basis showing total volume to date; figures for yearly sales totals are entered to the right of these columns. The total volume of sales for the previous year is used as a basis for establishing the next year's sales quota for each account, and is also the basis on which the sliding insert is set up to calculate the current year's business. The total for the previous year is the 100 per cent total for the current year.

After dealers have been classified as ledger accounts, this information is entered on a sales record card, which is placed in a pocket with a

printed insert along with the necessary signals to classify the account. Each insert is set at the total dollar value of annual business for last year for the account. This system works in the manner of a slide rule in automatically translating cumulative sales into percentages of the sales quota set for individual accounts.

A narrow red signal at the left of the card is used to show the month of the latest call by the salesman in that territory. A yellow signal used at the left of the card denotes a muffler customer; a blue signal, a spring customer. Smaller colored signals are used in conjunction with large signals to classify further these accounts as to type of parts sold. A purple signal is used to classify a customer as a branch or jobber of a parent account.

Figure 27 shows how this visual system of sales analysis works when the cards are placed together in a tray and arranged according to territories. These cards cover the first 3 months of 1946. Glancing at the signals, the sales manager will not pay attention to the first and last cards, because the signals are in a normal position. In both cases these accounts have bought approximately 25 per cent of their yearly quota. At the end of March, indicators point to 25 per cent for most of the cards. However, the indicator on the second card is to the left and shows this account has bought only 14½ per cent of its quota instead of 25 per cent. This account is lagging almost 2 months behind the others in sales volume. Following through, the sales manager glances to the left of the card and notes a salesman has not called since January.

The third card stands out because the indicator is so far to the right. This tells the sales manager the account has filled almost 42 per cent of its sales quota, as compared to 25 per cent for most accounts.

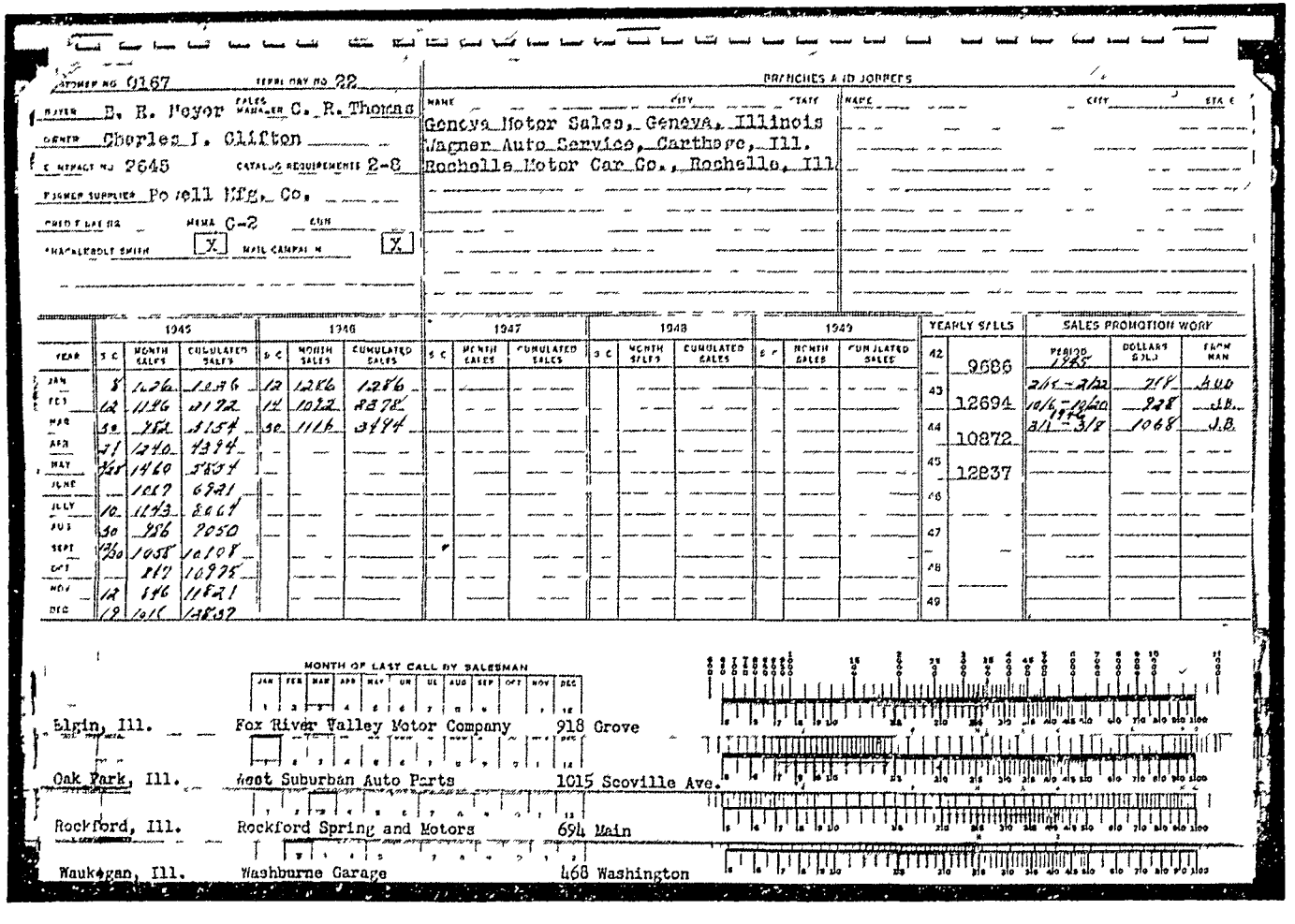

Fig 27.—By glancing at the visible margins of these cards arranged by territories, this sales analysis system used by Maremont Automotive Products, Inc, tells at a glance which accounts are ahead of or behind their sales quotas for each month.

to reinstall a variant no better because modern business cannot be done profitably without records of experience. It costs no more to have a genuinely useful record than to have a record that is a failure through and through.

Fix the responsibility. Experience has taught that the way to make sales control records the powerful aid to sales department operations that they can and should be is to make a staff employee of the administrative department responsible for the design, installation, operation, and analysis of the sales control record, so that the sales manager is free to use it. This is no different from the universal practise of making the comptroller responsible for preparing financial records for the use of plant executives who are not expected to concern themselves with accounting techniques in detail.

The first step that must be taken to insure a workable and profitable sales control record is to assign somebody to this job and to stipulate that he be solely responsible for the record and coordinate it with the sales department. Unless and until this is done, sales control will be at least partly illusion and far less useful and profitable than it should and can be.

Analyze the problem. The next step is to analyze the business in relation to the economy. The best way to go about this important task is by consultation among the administrative, financial, and sales executives. Some of the points to consider are: plant capacity and location with respect to markets; product range; breakeven point volume; volume objective; nature and extent of expansion plans, if any; balance sheet position; competition encountered directly from other makers of like products and indirectly from alternative products that can accomplish the same general purpose; size, location, and relative importance of markets for each class or type of product; buying habits and practices of ultimate consumers and intermediate handlers; channels of distribution used, and alternate channels available; number of customers; number of prospective customers; distribution of customers and prospects by relative importance; minimum size of profitable transaction; importance of unprofitable transactions from a service point of view; number and location of salesmen or branch offices; gross profit margin by product classes; salesmen's compensation plan and possible modifications thereof; long range and cyclical trend of demand by product classes, and seasonal variations among them; etc.

When these and related points that will suggest themselves in terms of one's own business are set down and answered in orderly fashion, the kind of sales control record one needs emerges in outline. Its probable size will also be indicated in general terms. It must be remembered that a sales control record is both a record of sales and an instrument of control—and the control aspect is by far the more important.

Why sales controls fail. Many sales executives and many sales control records fail to accomplish their objectives, because they concentrate too intently on the individual accounts and summations of them. The "law of averages" in the sense it is commonly understood is the worst

enemy of salesmen and sales executives. It is perfectly true that you've got to make calls if you want to get results; but it is equally true the calls have to be in the right places at the right times, if the results are to meet expectations. Averages are all right when they are properly used, but they are too often misused.

"Averages" conceal the facts. If you have eleven customers who buy $1,000 each and one who buys $133,000, it is true your average sales per customer are $12,000; but it means nothing. Yet too often sales statistics are put in a form that conceals the important facts by averaging or adding them in with unimportant things. When that is done, the sales control record becomes self-defeating. The real function of the sales control record is to increase profits, either by increasing sales through bringing the salesmen face to face with potentially profitable customers a greater share of the time or by cutting the costs of distribution—or both. It cannot perform that function, if it is used merely for individual account control on a hunch basis or if it is used as a means for "getting up a report" of salesmen's and branch offices' total of sales and calls.

Sales record "musts." What it can show and what it must be made to show, if it is to be a real aid to management, is the true condition of the sales activity. It must show what constitutes a profitable customer, and how many customers are profitable. It must show what kinds of customers are unprofitable, and how many of them are being sold. It must define profitable and unprofitable customers in ways that enable the management and the salesmen to differentiate among prospects so that time and promotional effort goes only to those who have a reasonable likelihood of returning a profit when and if they are sold. By revealing such facts as these, it lays a basis for some real sales planning and for seeing to it that the plans are followed as long as they remain sound and are modified when changes are needed.

Specifically, the sales manager can:

1. Interdict salesmen's calls on the unprofitable group and the prospects like them;
2. Prune his sales promotional lists of all the worthless names;
3. Assign salesmen's call quotas to the worthwhile customers and prospects like them;
4. Locate present customers and actively cultivate prospects who offer potential volume in lines not now bought from his organization, and see to it they are solicited regularly for this business;
5. Develop and commence cultivation by salesmen's calls and direct mail of new and hitherto unsolicited prospects having the characteristics of the profitable customers;
6. Reduce travel costs and wastes of time spent in beating the bushes for unprofitable accounts;
7. Modify the compensation plan along lines that will make it financially worthwhile to concentrate on assigned accounts and prospects without raising the percentage of direct sales expense; and
8. Reduce office costs, shipping and billing expense, outbound freight costs, and many other overhead items through the reduction in the number

of transactions necessary to conduct the same or a greater volume of business at better margins of profit.

When these kinds of benefits are obtained, sales control becomes a profitable reality. They cannot be obtained unless one knows where and how to seek them. This knowledge can be learned from a well organized sales control record.

12

Office Management in the Advertising and Sales Promotion Department

As in the case of the order and sales departments discussed in previous chapters, a very considerable amount of office management and record-keeping work is done in the advertising and sales promotion departments. Unlike most other departments, however, the precise duties and responsibilities of the advertising department vary rather widely with different companies. In addition, the way in which the work is divided between the advertising agency and the company advertising department obviously has an important influence on the nature and extent of the work to be done by the company itself. Before turning to a discussion of office management in the advertising and sales promotion departments, therefore, these matters must first be considered.

The place of the advertising function in business organizations. The place of the advertising and promotion function depends both on the nature of the business and on the particular situation within the company. In many manufacturing establishments the advertising manager is responsible to the sales manager. This arrangement is used not because the advertising manager is less important to the company than the sales manager, but because the sales manager is responsible for the distribution of the company's products, and, therefore, everything that aids him in distributing them successfully, including, of course, advertising, should be under his general supervision. In some concerns close coöperation between advertising and sales is secured by making the advertising manager an assistant sales manager, and, in turn, making the sales manager assistant advertising manager.

In other industrial organizations advertising and sales promotion are two separate departments, although each necessarily works

within the company who will act not only as contact man between the company and the agency, but who also will head a department that will be responsible for doing a considerable amount of actual advertising work.

Duties of the advertising and sales promotion departments. As has been indicated, the specific responsibilities of the advertising departments vary considerably in different lines of business, and also with different concerns within the same industry. McKinsey & Company recently made a survey for the Association of National Advertisers, Inc., of the organization of the advertising activities of a number of member companies.[1]

> Our examination of the organization of the advertising activities of the participating companies—as would be expected—discloses no definite pattern. Naturally advertising organization is influenced by factors such as objectives, scope of advertising responsibilities, need for coordination with other activities such as public relations, and the size of the advertising budget.
>
> To the extent that generalizations on advertising organization can soundly be made, this can be said:
>
> 1. Since advertising is used primarily as a selling tool, in the majority of medium-sized and smaller companies advertising activities are regarded as an integral part of marketing. In such cases the Director of Advertising reports to the chief marketing executive.
> 2. In many companies, the sheer size of the advertising budget or the importance of advertising to the particular business calls for a separate division, with the Director of Advertising reporting to the chief executive. In such cases sales promotion activities are usually a responsibility of the Advertising Division. This organizational set-up is common in the larger companies.
> 3. In some companies advertising is closely allied with public relations. Here the two positions are combined, with the chief of the division reporting to the President.
>
> Our study indicates that currently there is a considerable amount of reorganization and realignment of advertising responsibilities and relationships. For example, several companies expressed a desire to participate in the study but were unable to do so because advertising activities were in the process of reorganization. In two instances participating companies realigned advertising activities while our study was in progress.

The following check list of activities indicates the many duties which are found in advertising departments.[2]

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[1] "Organization of the Advertising Function," Association of National Advertisers, Inc., New York, 1946, p. 5.

[2] *Ibid.*, p. 169.

Check List of Activities (other than product advertising) Performed by 202 A.N.A. Member Companies

This is a tabulation of replies from 202 A.N.A. companies relative to the non-product-selling activities performed by the Advertising Departments in these companies. The limitations of this tabulation should be recognized; it does not indicate the *frequency* with which an activity is performed nor its *importance* in the company.

NUMBER AND PER CENT OF TOTAL REPLIES

ACTIVITY	Adv. Dept. Fully Responsible		Adv. Dept. Assists Other Depts.		Adv. Dept. Fully Responsible or Assists	
	Number	*Per cent*	*Number*	*Per cent*	*Number*	*Per cent*
Handle institutional advertising	175	86.6	13	6.4	188	93.0
Prepare displays for dealers or distributors	173	85.6	10	4.9	183	90.5
Prepare exhibits and other material for shows, conventions, etc.	161	79.7	39	19.3	200	99.0
Handle publicity releases	148	73.2	24	11.9	172	85.1
Develop visual sales material, such as easels and portfolios	146	72.3	33	16.3	179	88.6
Prepare catalogs	139	68.8	17	8.4	156	77.2
Prepare motion pictures or sound slides for use in sales departments	115	56.9	30	14.8	145	71.7
Prepare easels, slides, etc., for speeches by others	112	55.4	38	18.8	150	74.2
Edit house magazines for dealers	105	52.0	8	3.9	113	55.9
Edit consumer house organs	100	49.5	9	14.5	109	54.0
Handle dealer cooperative advertising	98	48.5	14	6.9	112	55.4
Do package design work	96	47.5	54	26.7	150	74.2
Do market research	96	47.5	63	31.2	159	78.7
Prepare motion pictures or sound slides for use in strengthening public relations	95	47.0	23	11.4	118	58.4
Edit employee publications	85	42.1	25	12.3	110	54.4
Hold consumer meetings or schools	74	36.6	17	8.4	91	45.0
Handle ceremonies such as "E" awards, etc.	72	35.6	54	26.7	126	62.3
Prepare internal posters for employee morale building	71	35.2	54	26.7	125	61.9

NUMBER AND PER CENT OF TOTAL REPLIES *(Cont.)*

ACTIVITY	Adv. Dept. Fully Responsible		Adv. Dept. Assists Other Depts.		Adv. Dept. Fully Responsible or Assists	
	Number	*Per cent*	*Number*	*Per cent*	*Number*	*Per cent*
Provide facilities for public functions	66	32.6	41	20.3	107	52.9
Prepare material for interpreting Company policies to employees	65	32.2	52	25.7	117	57.9
Advertise company's products and/or policies direct to stockholders	63	31.2	30	14.8	93	46.0
Hold dealer meetings	63	31.2	58	28.7	121	59.9
Do sales analysis work	57	28.2	56	27.7	113	55.9
Handle pretesting of products	55	27.2	50	24.8	105	52.0
Prepare speeches for others	54	26.7	85	42.1	139	68.8
Prepare motion pictures or sound slides for use in strengthening employee relations	47	23.3	36	17.8	83	41.1
Prepare releases and bulletins to stockholders	46	22.7	47	23.3	93	46.0
Handle company drives, such as bond and community fund	44	21.8	80	39.6	124	61.4
Arrange employee affairs, such as athletics, parties, etc.	32	15.8	49	24.2	81	40.0
Prepare annual report	31	15.3	81	40.1	112	55.4
Advertise for new employees	30	14.8	118	58.4	148	73.2
Prepare material for use in dealing with the government	27	13.3	55	27.2	82	40.5
Prepare material for stockholders' meetings	15	7.4	37	18.3	52	25.7

Departmental records. The following sections describe the more important basic records used in the majority of advertising and sales promotion departments.

Record of prospects. One of the most important records of the advertising department is the prospect file and follow-up card. Such a record is used in connection with direct-mail campaigns, and also for the purpose of recording the follow-up work done with a prospect whose name has been secured as the result of an inquiry based on an advertisement, or from other sources. The card will naturally contain, usually in the heading, the name, address, and business of the prospect, while the body may have a number of

columns for recording information on what has been done and also for noting the final disposition of the case. Such headings as

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Name		Address				
Kind of Business		Source of Inquiry				
Follow-up	Date Sent	Sale		Dropped		Remarks
		Value	Date	Date	Reasons	
First Letter						
Catalogue						
Second Letter						
Folder						
Third Letter						
Fourth Letter						
Fifth Letter						

Fig. 28.—Prospect Follow-Up Card.

"First Letter Sent (date)," "Second Letter Sent (date)," "Folder (or catalogue) No. — Sent (date)," and so on, are used for recording information in the body of the card. Inasmuch as all correspondence with the prospect, of course, is filed separately, it is desirable that the prospect card have a space for a cross reference which will show where such correspondence may be found. When the time at which the various pieces of mail matter are to be sent out is important, or when it is desired to follow up a customer on a specific date in the future, the use of a small guide tab placed at the top of the card over the particular date will make the follow-up practically automatic. Numbers 1 to 31, each representing a date in the month, can easily be printed in a line across the top of the card for this purpose. Prospect cards are usually filed alphabetically according to the name of the prospect, although other methods of filing are sometimes used—for example, filing the cards according to the article or product in which the prospect is interested, and so on. Figure 28 illustrates one of the forms used for such records.

Mailing lists. Closely allied with the prospect card, and frequently the source from which names for prospect cards are secured, is the mailing list. While it is by no means an easy task to secure a really good productive list of names, there are several sources that may be used to advantage. A number of companies specialize in the business of compiling mailing lists, which they then sell to business organizations. Directories, club memberships, lists of

magazine subscribers, lists of telephone subscribers, and many other sources are also widely used.

Mailing lists are usually prepared alphabetically, often subdivided geographically by states, counties, and cities. The names themselves may be kept either on sheets of paper, in which case they are filed in the regular way under an appropriate heading, or on stencil plates or cards. The method best suited to a particular case depends largely upon the way in which the names are to be put on the envelopes or wrappers. If either hand or typewriter addressing methods are to be employed, the names may be listed on sheets. If, however, the list is to be run off on an addressing machine, the stencil plate is preferable. The latter method is really economical only when the volume of work to be done is large.

Every advertising department should also make some definite provision for a record on which employees of this or other departments may note possible new sources of names that come to their attention. Such a record may be made of considerable value, since it affords an opportunity to preserve for future reference specific suggestions that might otherwise be lost or forgotten.

The auditing of mailing lists. It is important that mailing lists be audited regularly. The waste from duplications, and mailing to dead names and non-prospects, is startling. This waste is composed of the excess postage paid to the government and the cost of paper and printing service for quantities of non-deliverable printed matter.[3]

In order to revise lists, the advertiser should:

1. Send out an inquiry every year, under first-class cover, asking the recipient to help correct the list by returning the card and supplying the correct address. The outside of the envelope should have a notice to the postmaster, similar to the following: "Postmaster: If mail is not deliverable to address shown, please return to writer." The notice will usually prevent the postmaster from forwarding the mail in case the addressee has moved, and enables the sender to run down the correct address.
2. Watch the trade papers for notices of changes of address or name, new concerns, combinations, deaths, etc.
3. Ask your salesmen (company salesmen, distributors' or dealers' salesmen) to advise you of all changes. Some concerns supply salesmen with "change of address" blanks.
4. If lists of names in cities are of worth-while size, send them to

[3] Tompkins, C., "How to Audit a Mailing List," *Advertising & Selling*, March, 1946, p. 58.

the postmasters in those cities for checking the names and addresses. They will eliminate dead names, show changes of address, etc., for a nominal fee.

5. All third-class mail should carry the legend, "Return postage guaranteed" and also the clause: "Postmaster: If addressee has moved, notify sender on Form 3547, postage for which is guaranteed." These legends will help weed out the dead names but they won't do the entire job.

6. All mail should be zoned, if possible, to speed delivery and to effect delivery which might not otherwise be made. The Post Office Department is glad to assist in zoning lists. If the lists are separated into cities, the postmaster will mail them to postmasters in the various cities under his franking privilege, without cost to the advertiser. Each individual post office will zone the list and return it in from three days to two weeks, depending on how busy the post office is.

Many concerns have definite regulations for weeding out unproductive names. Sears, Roebuck and Co., for example, is able to grade its customers—as a result of its long experience—into groups, based principally on the customer's past business record. Groups with low potential business value are removed from the files periodically.

The advertising budget can often be relieved considerably when the list has been brought up to top efficiency. Every dead name removed means a substantial saving in postage, cost of printed matter, addressing, stuffing, etc.

Records of advertising rates. Just as a purchasing agent naturally wishes to have a record of the prices he pays vendors for various materials that he buys from them, so the advertising manager wants records of the cost of what he buys in large quantities annually, namely, advertising space and time. A record of advertising rates of all mediums in which advertising has been placed, as well as similar information about mediums that have not been used but which may be given favorable consideration later on, is an essential part of the system of records of the advertising department. Such information is available in catalogue or book form. For each newspaper and magazine the listing shows the name and publication address of the medium, total circulation, space rates for the various units of space which may be used, such as a full page, a half-page, a full column, a half-column, and so on, frequency of publication, rates for copy containing colors, and so on. Similar data are compiled for all radio stations that sell time to advertisers. Most advertising mediums themselves also print rate cards containing the same kind of information.

Record of advertising costs and results. An advertising manager uses one medium or refuses to use another because of the results, or lack of them, that he obtains. For this reason he needs

a record that will give definite information on returns in relation to their cost. A record of advertising costs and results by mediums gives this information. For example, the record may show that $5,000 was spent on an advertisement in a particular medium on November 14. As the result of this advertisement, 450 inquiries were received. This may be determined, in many cases at least, by keying each advertisement. If 150 orders were secured from these 450 inquiries, the direct advertising cost of securing the orders would be $33.33 each. Although $5,000 for a single insertion may seem high at first thought, the advertising manager, by reducing this figure to a unit-cost basis, is in a position to know whether a relatively few advertisements placed in this medium yield a better return on the investment than a similar number placed in another medium at a lower rate. While the use of such a record is limited to cases in which it is possible to identify inquiries through the use of key symbols, nevertheless, it furnishes an excellent basis upon which to judge the value of the results secured. Figure 29 illustrates one form of such a record.

Medium	Publication Date	Cost	No. of Inquiries	No. of Orders	Value of Orders	% Direct Adv. Cost to Gross Sales	Remarks

Fig. 29.—Record of Advertising Costs and Results.

Record of results obtained by an advertisement. Another record frequently used is one which gives information about the pulling power of various advertisements. It sometimes happens that a particular piece of copy or radio "commercial," which everyone in the advertising department thought would "pull" extremely well, fails to justify itself when put to the test, while another, which may not have been considered so good, proves to be a huge success. A record that shows actual results obtained is one which many advertising managers find valuable. Inquiries and orders received from each advertising message which can be identified are recorded in much the same way that results by mediums are entered on the record just discussed.

Checking advertising results. This subject of checking the results of advertising was discussed in detail by the Advertising Manager of American Photocopy Equipment Co. Her recommendations follow:[4]

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[4] Weinberg, H. J., "Keeping Tabs on the Ads," *Printers' Ink*, June 15, 1945, p. 24.

Any advertiser who expects to secure leads from his ads can use his own records as a means of testing the effectiveness of his advertising.

To put thousands of dollars into advertising space, and then keep no accurate records of results, is like pouring that money down the drain. Yet there are advertisers who have only a very sketchy idea of what their ads are bringing in.

Keying ads. It seems almost unnecessary to state that inquiry copy must be keyed. How else can one know where the inquiries come from? Keying copy should not be haphazard. It should have a definite plan. Address keys are sometimes used to identify inquiries from certain publications, but addresses have not enough flexibility to identify specific insertions in different media. They won't take care of an extensive campaign—that is, one appearing in a long list of publications.

The use of key letters and numbers affords a much wider range. For instance, one may start with A and go on through the alphabet, using a different letter to indicate each different publication. An even easier method of identification is to use the initial letters of the publication itself. For instance, the Nut and Bolt Review could be keyed NBR, and the date of insertion would be indicated by numbers—the May 1945 issue being keyed NBR-55. The easiest place to insert the key in the advertisement is after the company address, for example Doolittle, Brag & Co., 182 Hooey St., Dept. NBR-55, Timeout 32, Ohio.

If several publications have the same initial letters, then, of course, some other combination would have to be used. One might be used backward—such as RBN, and so on. Once you have your key, you have the foundation stone on which the rest of your records study is built.

Handling keyed inquiries. Whoever handles the inquiries must have a list of key numbers and what they stand for, and must scrupulously enter every letter or card of inquiry with its key number. An easy way to do this is to have a rubber stamp for marking all inquiries. (See Figure 30.) This should include space for information on key number,

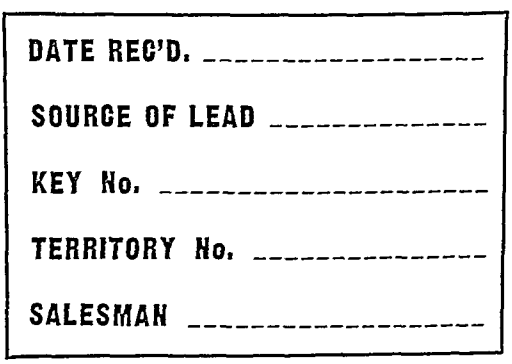

Fig. 30.—Stamp for Inquiries.

name of publication, date inquiry is received and salesman in the territory. The same information is put on a lead slip (Figure 31), which is made out in duplicate, one being sent the salesman and one kept for the company's prospect files. It is also very helpful to the salesman,

STATE	CITY	SALESMAN
PROSPECT		DATE
ADDRESS		INDIVIDUAL & POSITION
NATURE OF BUSINESS		

NATURE OF CONTACT	ORIGINAL INQUIRY	LETTER	PHONE	VISIT	DEMONSTRATION
HAVE THEY SEEN DEMONSTRATION	NO	YES	WHEN?	WHERE?	

REMARKS:

SOURCE OF LEAD

Fig. 31.—Lead Slip.

if you send him a photocopy of the original letter of inquiry. The key symbol is now entered on a daily record sheet, and each time an inquiry is received bearing this symbol, a check mark is made under that key. At the end of the day the checks under each key are totaled, and the total is entered in permanent records books.

Advertising media. Where a long list of trade publications is used, it is wise to have a record book or ledger for each classification given in Standard Rate and Data. Then the publications which come under that classification are arranged alphabetically, and each ad in a publication is given a separate page, in chronological order. The best way to keep these records accurately is to rule the sheets for months and days, and divide each column into spaces for inquiries and sales. The inquiries and sales should be totaled at the end of each month. In a space at the bottom of the sheet periodic cumulative totals can be written in, in pencil, to check how the ad is going. A tear sheet of the ad should be pasted on the back of the page.

Of course, it is of the utmost importance to know what pieces of copy are pulling in each publication, and what pieces have pulled the best in general. For this reason, each piece of copy should have a code number or letter, starting with 1 or A. The copy code number should be written on the record page in the advertising ledgers discussed above. Then, when you look through the records of a certain publication for six months or a year, you can see at a glance which pieces of copy pulled best in that publication.

Salesmen's advertising ledgers. One of the most important checks which can be made on keyed advertising is to find out which territories

are receiving too many and which too few leads, and what your salesmen are doing with those leads.

A good idea is to keep a separate record book for each salesman, a ledger of accounts with salesmen. In this book should be entered each day the name and address of every prospect who writes or phones, with the date inquiry was received and the source of lead. Space should be left for the salesman's remarks when he reports his calls on the prospect, as well as dates when follow-up letters are sent to prospect, and space for date of sale. Salesmen should be required to report contacts with all prospects on special report forms for this purpose.

Salesmen's report on prospects. A good report form for salesmen provides space for the salesman's name; date of his call on prospect; whether his contact was by letter, phone or visit; date of original inquiry (indicate whether a lead or a cold call); the name of the prospect's firm; the prospect's name and position; the address, city and state. With equipment that must be demonstrated, space should be given to indicate whether demonstration has been made, when and where. Then there should be ample space at the bottom of the form for reasons for no sale. Be specific here, having the form state, "If you have not sold—give three reasons." The forms should be the same size as the lead slips, so that they may be filed with them, but they should be a different color to avoid confusion. (Figure 32.)

<table>
<tr><td>STATE</td><td>CITY</td><td colspan="5">SALESMAN</td></tr>
<tr><td colspan="2">PROSPECT</td><td colspan="5">DATE OF MY CALL</td></tr>
<tr><td colspan="2">ADDRESS</td><td colspan="5">INDIVIDUAL POSITION</td></tr>
<tr><td colspan="2">NATURE OF BUSINESS</td><td colspan="5">1.
2.
3.</td></tr>
<tr><td>IF COLD CALL, CHECK HERE</td><td colspan="2">IF LEAD, GIVE DATE OF ORIGINAL INQUIRY</td><td colspan="4">MY CURRENT CONTACT WAS:</td></tr>
<tr><td></td><td colspan="2"></td><td>LETTER</td><td>PHONE</td><td colspan="2">VISIT</td></tr>
<tr><td>HAVE THEY EVER SEEN DEMONSTRATION?</td><td>NO</td><td>YES</td><td colspan="2">WHEN?</td><td colspan="2">WHERE?</td></tr>
<tr><td colspan="7">IF YOU HAVE NOT SOLD THEM—GIVE 3 REASONS</td></tr>
</table>

this form should allow space for any specific complaints the customer may have, whether he is using his equipment, whether he needs new supplies, etc. (Figure 33.)

STATE	CITY	SALESMAN
PROSPECT		DATE OF CALL
ADDRESS	INDIVIDUAL & TITLE	
NATURE OF BUSINESS		

IS MACHINE IN USE?	YES	NO	IF NOT IN USE, GIVE REASONS
ARE SUPPLIES NEEDED?	YES	NO	DID YOU SELL SUPPLIES? YES NO — IF NOT GIVE REASONS
DID YOU GIVE INSTRUCTION?	YES	NO	DID YOU SERVICE MACHINE? YES NO — ANY SPECIFIC COMPLAINTS:
HAVE YOU SHOWN NEW OR ADDITIONAL USES?			YES NO
TO WHICH DEPT. HEADS? (GIVE NAME & TITLE)			

Fig. 33.—Salesman's Report on Customers.

Entering sales reports. Just as inquiries should be entered in a daily record book and later transferred to a ledger, so also for sales. As the orders come in, a file clerk should look up the original lead under that name and find what source originated the order. The key number and name of publication should be written on the order—also the date of the original lead. The date of the lead provides valuable information if the advertising department wishes to check the average lag between date of inquiry and date of sale. The advertising record clerk should, of course, enter the publication key numbers for orders on her daily record sheets in the same way that she did for inquiries, and later these should be transferred to the ledgers.

Periodic advertising reports. It is a good idea to make a periodic check on the results of ads in publications, for this prevents running a poor piece of copy for too long a time, or scheduling advertising in a publication that is not producing results.

These reports can be made monthly, bi-monthly or every two months, whichever period the advertiser finds more valuable for checking on results. These reports represent a good deal of manual labor, so it is not necessary to make them out in detail each time. A long sheet should be used. At the left have spaces for the copy number, the name of the

publication, date of issue, appearance date and cost of ad. Then the form should provide spaces across the page to write in the number of inquiries, cost per inquiry, number of sales and cost per sale. This need only be written in completely in the first spaces. After that only additional inquiries and sales need be indicated. In this way there is room on the form for about six reports. These could cover a period of from three months to a year—depending on how often the advertiser decided to make the reports. Where an advertising agency is used, it is a good idea to send the account executive photocopies of this report.

A glance through this report will show management what publications and what pieces of copy are pulling, and will help in planning future advertising. Of course, the exact number of inquiries and sales received from any single piece of advertising should not be taken as too literal an indication of the value of a publication or a piece of copy. Every advertiser will receive a number of inquiries that give no key number and must be credited to "unknown sources." Therefore, the report should be used for basis of comparison only and should be weighed in the management's minds with contributing factors.

Another valuable report, particularly as a check on advertising expenditure, is a monthly record of all types of business received—that coming from publication advertising, from direct mail, from trade shows, from recommendation, from cold calls and from unknown sources. This should include cost for each and cost per inquiry and per sale, as well as total costs. It should also indicate the percentage of business coming from each source, and the percentage of closures from inquiries. The direct-mail part of the report should show percentage of returns based on pieces mailed.

This report can also be figured quarterly, half-yearly and yearly, and used for comparison with previous years.

Important information as to the value of different publications comes from finding out which produced the leads that resulted in the greatest repeat business. This can be ascertained from a customer record card on which the source of original lead is shown and every purchase is entered. A periodic checkup here will often show that some publications which are pulling only a few leads have resulted in sales that meant big repeat business.

Direct-mail records. The keeping of direct-mail records is a subject in itself. First of all, every list should be given a key number, and every mailing of that list should have an additional key. This corresponds to the key used for date of issue in publication advertising. For example, List A, mailing of March 12, 1945, is keyed A-3/125. A separate page should be kept in the direct-mail advertising ledger for each mailing, and inquiries and sales entered exactly as for publication ads. In addition, the number of pieces mailed should always be shown. so that a percentage of returns on every mailing can be figured. This tells what seasons of the year are best for direct mail.

On the back of each sheet paste the mailing piece and return card

which were used in that mailing. In this way, one can easily make a check and see which mailing pieces are most effective, and which colors get the best response.

Be sure that your return cards are keyed, so that when they come back you will know what list and what mailing they belong to. The *ideal situation, of course, is to have a different color for every mailing,* but this is not always possible. One way to key is to have cards of the same color stamped with different numbers. Another is to cut a corner off the card. Be sure the sample card you paste in your ledger has this number or cut for identification.

Recording test mailings. Suppose you are mailing 3,000 pieces for a test, trying out three different circulars—one for each 1,000—and using a different return card for each circular. Keep a separate page in your ledger for each of these mailings as explained above, and in about three weeks you will be able to see your results.

Some Suggested Analyses of Records

1. Check copy appeals. After you have been keeping your advertising reports for about six months, check each piece of copy through every publication in which it was used. Record total cost of that copy and divide by number of inquiries and sales to get the average cost per inquiry and per sale for that piece of copy. Then compare these results. See which copy appeals have done the best consistent job, which have been best in executive publications, which in business papers.

2. Check publications regularly to see which are producing cheapest inquiries and sales, which are closing greatest percentage of leads.

3. Check your customer record cards to find out what source of leads is producing biggest repeat business.

4. Check your salesmen's record books to find out which territories are producing most leads, which too few, etc. If you wish, check by publication, and find out whether certain publications seem to pull more in certain territories.

5. Check salesmen's record books to find out what percentage of the leads each salesman is actually contacting, and what percentage of the contacts he is selling.

6. Analyze reasons given by salesmen for "no sale" to find out if advertising was in any way misleading or not informative enough.

7. Analyze salesmen's reports on visits to customers to find out what your customers like about your product, what specific complaints they have, how well they are satisfied with your service, etc.

8. Check on what happens to leads from some particular ad which perhaps has pulled a lot of leads and closed poorly. Go through salesmen's ledgers and analyze their reports on these leads. Find out how many were mere curiosity, how many actually had no use for your product, how many misunderstood your advertising, and how many the salesman failed to do a good job on.

9. Make periodic check on inquiries and sales to see from what types

corresponding with such prospects and making certain they get what they want.

Requests for technical assistance go to engineering service, where a staff of three or four engineers answer the requests, some of which may require hours of work to prepare the information. Some typical requests are: The procurement and office engineer of a Chicago building material manufacturer asks help in designing the radiant heating layout for a small office building. A general contracting firm of San Bruno, California, sends calculations and layout for a residential radiant heating system for criticism.

The 117 letters designed to go to Direct Mail Service are simple requests for technical bulletins and are first scanned carefully by a sales promotion clerk, who time-stamps each one, indicates by number the personalized letter that should accompany the bulletin, and designates the sales territory from which the request originates.

The letters are then taken to Direct Mail Service, where the proper bulletin is taken from the stock room, and the covering letter is processed and then personalized by typing in the name, address, and salutation. The mail is scheduled to go out the same day the request is received. The original letter of request is again time-stamped to show when it was answered and is forwarded to the proper sales division of Byers for follow-up.

It should be noted that the routine of this work automatically gives inquirers and prospects same-day service, yet important inquiries get the personalized attention of the sales promotion manager or the engineering service department.

13

Office Management in the Purchasing Department

Like office management activities, purchasing has not always been centralized. Prior to World War I, purchasing was considered by many businessmen to be a function that could be carried on by a department head in his spare time. In comparatively few of the larger and more progressive concerns, to be sure, there was some centralized buying, especially of basic raw materials. For the most part, however, the purchase of sundry supplies and materials was a part of the work of each department head. That war brought a very noticeable change in these conditions. Many centralized purchasing departments were established. Little consideration was given, however, to prices paid, sources of supply, records, or systems. Purchasing was in most cases largely a matter of buying the best that could be obtained under the circumstances, at whatever price one had to pay and from whoever was able to make the quickest delivery.

This condition prevailed until the summer of 1920. Then a definite change took place, due primarily to depressed business conditions. Many companies found themselves with large stocks on hand of both raw materials and finished products, which in many cases could not be disposed of at cost, much less at a profit. The practical importance of accurate, complete, and detailed records and of proper systems of control became quickly apparent. Purchasing agents were rather rudely awakened to the fact that skillful purchasing did not consist wholly of signing their names to purchase orders, or of acting as transfer agents of facts from purchase requisitions to purchase orders. They began to realize that rule-of-thumb methods of buying, as well as failure to utilize the best methods for recording the many kinds of information which they must have constantly available, were bad business policy because they were likely to be costly. Centralized purchasing, which in many cases had been something of an experiment or had been

looked upon as a temporary expedient, was more and more adopted as a permanent policy. Records and office methods that gave the vital facts in concise form were adopted. Today by far the greater portion of firms operate their purchasing departments on this more efficient and economical basis.

The office manager's interest in purchasing. The work of the purchasing department is an activity in which the office manager usually has a particular personal interest. In the first place, the office manager in a small concern sometimes also acts as purchasing agent. This is especially true in the case of the branch-office manager, who often combines the responsibilities of office manager, personnel executive, purchasing agent, accountant, and credit and collection manager. Second, the office manager necessarily has constant relations with the purchasing department in connection with the purchase of office equipment and supplies, and often in connection with the supervision and operation of the stationery stock room. And finally, as the executive who has a functional interest in the methods, systems, and procedures of all departments, the progressive office manager should make it part of his business to audit purchasing department methods periodically, just as he does those of all other departments.

Scope of the purchasing function. As in the case of every other operating department, the function of the purchasing department and the scope of the authority and responsibility of the purchasing agent, or director of purchases as he is frequently called, vary in practice rather widely. In some cases his work consists almost exclusively of purchasing, and the purchasing department is in effect a specialized service section of the production department. In other organizations, on the contrary, the director of purchases is a departmental executive who reports directly to the president or general manager and who is responsible for traffic, inventory control, stores, testing, inspection, and receiving, as well as for purchasing.

Principles of procedure. In a discussion of purchasing procedure, Professor H. T. Lewis of the Harvard Business School recognizes seven principles of sound procedure which should be applied when considering the establishment of a procurement procedure.[1]

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[1] Lewis, H. T., *Industrial Purchasing—Principles and Practice*, Business Publications, Inc., Chicago, 1940, p. 78.

RECEIVED		ACTION	FORWARDED	
By	*Copies*		*Copies*	*To*
Stores Record Clerk		Examines stores record cards. When stock on hand reaches minimum required, stock cards & req. in dup. are sent to Purch. Agent for approval and sig.	Stock Card Purch. Req. (in dup.)	Purch. Agt.
Purch. Agent	Stock Card Purch. Req. (in dup.)	Approves purch. by signing req.	Stock Card Purch. Req. (in dup.)	Stores Record Clerk
Stores Record Clerk	Stock Card Purch. Req. (in dup.)	Retains stock card & req. dup.; sends req. orig. to Div. Supt. concerned for approval and sig.	Purch. Req. (Orig.)	Div. Supt. concerned
Div. Supt. concerned	Purch. Req. (Orig.)	Approves purch. by signing req.	Purch. Req. (Orig.)	Stores Record Clerk
Stores Record Clerk	Purch. Req. (Orig.)	Attaches req. dup. to req. orig. & sends to Order Clerk	Purch. Req. (in dup.)	Order Clerk
Order Clerk	Purch. Req. (in dup.)	Makes out purch. order in quadrup.—orig., 1st copy (pink), 2nd copy (pink), 3rd copy (salmon card. used to enter amounts on perm. record cards).	Purch. Req. (Orig. Dup.) Purch. Order (Orig. Dup. Trip. Quadrp.)	Invoice Clerk Stores Record Clerk Supplier Receiv'g Rm. Inv. Clerk
Stores Record Clerk	Purch. Req. (Dup.)	Records purch. order No. & destroys req. dup.		
Invoice Clerk	Purch. Req. (Orig.) Purch. Order (Quadrup.)	Holds for check against mdse. invoiced.		
Supplier	Purch. Order (Orig.)	Upon authority of purch. order, supplier ships mdse. & sends inv.	Invoice Mdse.	Stores Record Clerk Receiv'g Room
Rec'g. Room	Purch. Order (Dup. Trip.)	Holds for check against mdse. rec'd.		
Rec'g. Room	Purch. Order (Dup. Trip.)	Mdse. rec'd from supplier held in rec. room until lab. has tested for qual-	Purch. Order (Dup. Trip.)	Raw Mat'l Stores

Fig. 34

RECEIVED		ACTION	FORWARDED	
By	*Copies*		*Copies*	*To*
	Mdse.	ity. In case of part shipm'ts, rec. room makes out white sheets against pink copy & each shipm't is noted on them.	Mdse.	Stores Rec. Clerk Raw Mat'l Storage
Raw Mat'l Stores	Purch. Order (Dup.) Mdse.	Checks mdse. & purch. order dup. when former arrives in dept. Mdse. issued as requisitioned.	Purch. Order (Dup.) Mdse.	Receiv'g Room File Prod. Depts.
Prod. Depts.	Mdse.	Mdse. rec'd as required.		
Rec. Room File	Purch. Order (Dup.)	Dup. of purch. orders filed.		
Stores Record Clerk	Purch. Order (Trip.) Invoice	Purch. order trip. is basis of entries on stock cards (goods rec'd, date, balance, etc.). Makes dup. inv. if necessary.	Purch. Order (Trip.) Invoice (in dup.)	Purch. Receipt Clerk Invoice Clerk
Invoice Clerk	Invoice (in dup.)	Checks mdse. invoiced against order. Checks extensions on inv.	Invoice (in dup.)	Purch. Agent
Purch. Agent	Invoice (in dup.)	Approves inv.	Invoice (in dup.)	Order Clerk
Order Clerk	Invoice (in dup.)	Checks inv. against perm. purch. record card.	Invoice (in dup.)	Purch. Cost Clerk
Purch. Cost Clerk	Invoice (in dup.)	Enters on recapitulation sheets & charges correct amounts of material represented on inv.	Invoice (Orig.) Dup.	Bookkeeper Div. O.
Bookkeeper	Invoice (Orig.)	Makes out check & files until due date.	Invoice (Orig.)	Purch. Receipt Clerk
Purch. Receipt Clerk	Purch. Order (Trip.) Invoice (Orig.)	Checks trip. of purch. order & inv. after mdse. has been rec'd. If check is O. K., clerk signs inv. in black ink. If mdse. has not been rec'd, clerk signs inv. in red ink.	Purch. Order (Trip.) Invoice (Orig.)	Purch. Files Bookkeeper
Purchase File	Purch. Order (Trip.)	Trip. of purch. order is filed.		
Bookkeeper	Invoice (Orig.)	On due date, inv. & check are sent to controller.	Invoice (Orig.)	Contr. Dept.
Div. O.	Inv. (Dup.)	Copy of supplier's inv. filed.	Check	
Contr. Dept.	Inv. (Orig.) Check	Check & inv. examined & check signed.	Inv. (Orig.) Check	Purch. Cost Cl. Supplier
Purch. Cost Cl.	Invoice (Orig.)	Cost data recorded & inv. filed.		
Suppliers	Check	Checks rec'd in payment for mdse. invoiced.		

Fig. 34 (Cont.)

1. The aim of all sound procedure is to accomplish a definite objective in the shortest, easiest manner consistent with accuracy and satisfactory results generally.
2. Simplicity is basic; a cumbersome system slows down operations and increases the possibility of error.
3. Good procedure needs to be definite and understandable in order to obviate friction, duplication, and confusion generally.
4. Responsibility should be fixed for each step of the performance.
5. The procedure should be sufficiently elastic and flexible to allow for either expansion or contraction as conditions require.
6. The system should be as inexpensive as is consistent with the task to be done.
7. Finally, however, the system must be adequate; regardless of how simple or inexpensive a system may appear to be, it is quite useless unless it performs with reasonable satisfaction the task for which it was created.

Essential Steps of Procurement

The essential steps of procurement in purchasing procedure may be indicated substantially as follows:

1. The ascertainment of the need.
2. An accurate statement of the character and amount of the article or commodity desired.
3. The transmission of the purchase requisition.
4. Negotiation for the possible sources of supply.
5. The analysis of the proposals, the selection of the vendor, and the placing of the order.
6. The follow-up on the order.
7. The checking of the invoice.
8. The receipt and inspection of the goods.
9. The completion of the record.

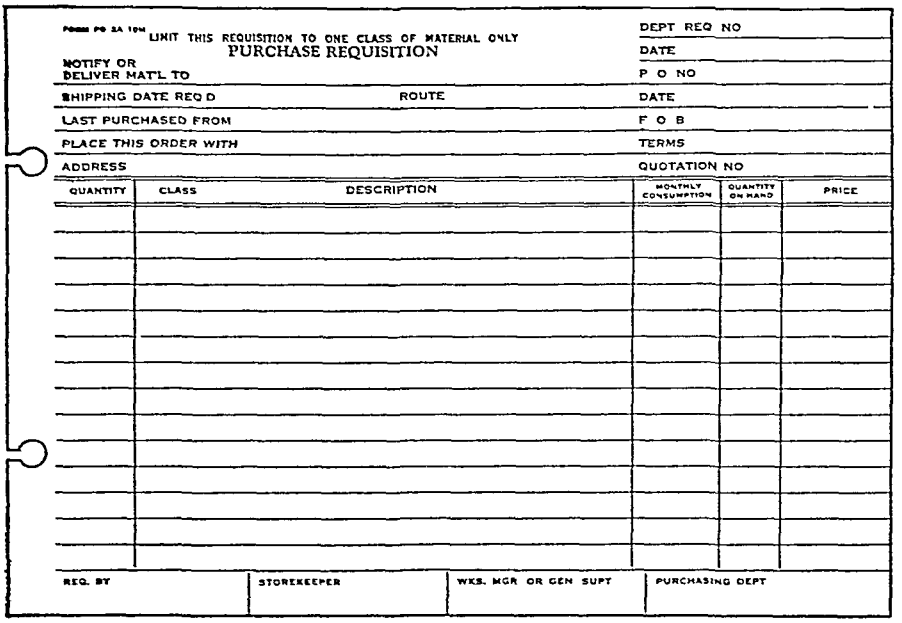
Figure 34 gives all the steps in procedure for one company.

Attention will be given in the sections that follow to all functions and activities of the purchasing department mentioned above. However, since the office manager is primarily interested in procedures, methods, and records, the work of the department is discussed, not by departmental divisions, but in the order in which the records are usually handled by the department. In this way it will be possible to secure a clear picture of the office methods and plan of work in the average purchasing department.

The requisition. Most of the work of the purchasing department starts with a purchase requisition originating outside the department, and received in duplicate.

Purchase requisitions should be honored only when approved by

designated authority. In most instances the stock and stores management will be this authority, but since many purchases require different approval, a chart of essential signatures should be set up. For quick identification and ready reference, code letters and definite number series should be assigned to each department authorized to issue purchase requisitions. Such a plan assists in establishing responsibility for each requisition, makes it easy to get or give information regarding it, and facilitates statistical work involving requisitions. Figure 35 illustrates a usual form of requisition.



LIMIT THIS REQUISITION TO ONE CLASS OF MATERIAL ONLY

PURCHASE REQUISITION

DEPT REQ NO

DATE

NOTIFY OR DELIVER MAT'L TO

P O NO

SHIPPING DATE REQ'D

ROUTE

DATE

LAST PURCHASED FROM

F O B

PLACE THIS ORDER WITH

TERMS

ADDRESS

QUOTATION NO

QUANTITY	CLASS	DESCRIPTION	MONTHLY CONSUMPTION	QUANTITY ON HAND	PRICE

REQ. BY | STOREKEEPER | WKS. MGR. OR GEN. SUPT | PURCHASING DEPT

Fig. 35.—Requisition.

The stock record. The first step taken by the purchasing department upon the receipt of a requisition is to determine whether a sufficient quantity of the item requested is available in the stock room. In many companies all requisitions are first sent to the storekeeper, who indicates thereon whether the item can be supplied from stock. In such cases, requisitions that can be filled at once from stock may never reach the purchasing department. The purchasing agent, however, receives many requisitions directly from operating departments for items regularly bought. All of these should be checked first with the stock records.

The primary purpose of the stock record is to give a complete statement of receipts, issuances, and balances on hand of every item carried in stock. This information is obviously essential if promised

delivery dates to customers are to be kept, if periodic financial statements are to be prepared at times other than when a physical inventory is taken, and if quantities to order are to be based on facts and not on guesswork. A separate card or sheet is kept for each individual item carried in stock.

The stock-record form. A form of stock record is shown in Figure 36. The heading should contain spaces for such information as name and symbol number of the item, unit of measurement used for ordering or issuance purposes, place in the storeroom where the material is stored (*section No. —, aisle No. —, bin No. —*), average consumption or usage of the material over a period of time (200 per month, for example), minimum and maximum quantities, order point, and so on.

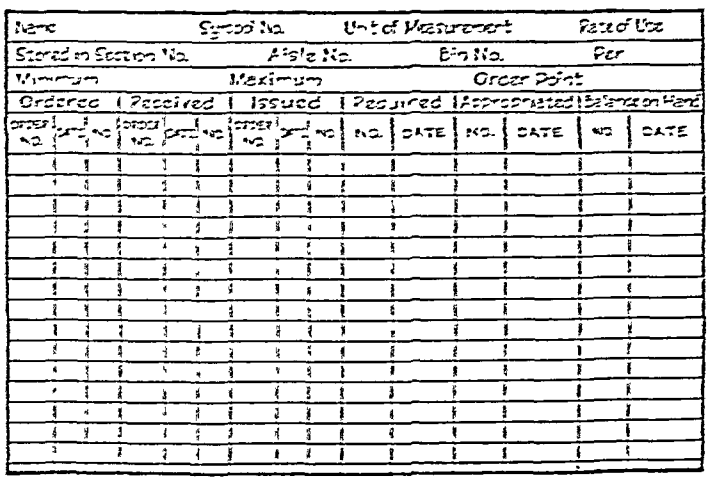


Fig. 36.—Stock Record.

gencies is always available, and a definite point for re-ordering is established as a guide for use by the storekeeper and the purchasing agent.

The body of the stock-record form should provide for main columns entitled Ordered, Received, Issued, and Balance Available. Under each of the first three main headings are sub-columns showing the purchase order number (or sales or production order number in the case of the Issued column), date on which the order was placed or received, and the number of units involved. The Balance column shows the number of units on hand and the date on which the balance was struck. In some cases additional sub-columns are provided under the headings Issued and Received for showing the unit price and the extended total price. Likewise, some stock-record forms contain sub-columns for running totals under both the Received and the Issued headings, thus eliminating the Balance column entirely. The claim is made, not without considerable foundation, that one does not need to know the balance on hand at all times, and that, moreover, this balance can easily be secured at any time by merely subtracting the last entry in the Running Total sub-column under the Issued column from the corresponding figure in the Received column. The fact, however, that the majority of stock records have a separate Balance column seems to indicate that the "running-total" plan has not gained very wide acceptance.

The Required and Appropriated columns are for use in cases where it is necessary to reserve or set aside certain quantities for sales or production needs before incoming goods that have been ordered have actually been received. In the Required column the details of the total number of units required are recorded. In the Appropriated column the number of available units appropriated for a given sales or production order number is noted. When the incoming shipment actually arrives, the remaining number necessary to complete the requirements is first entered in the Appropriated column. When the issuance has been made, the transaction is recorded in the regular way in the Issued column. For example, if sales order No. 10,892 requires 150 units, but only 100 units are now available, 150 is entered in the Required column and 100 in the Appropriated column. When the new lot arrives, the 50 needed to complete the total requirement is first entered in the Appropriated and then the total (150) entered in the regular way in the Issued column. Under certain circumstances, as, for example,

in the case of highly fluctuating demands in a seasonal business, the use of Required and Appropriated columns is of great practical value. In other cases there is little or no need of making provision for them.

The stock record is one of the mainstays of any adequate and comprehensive plan of record control for the purchasing and stores department. The increased attention being paid by businessmen to the matter of economy, as well as to business and market conditions in their relation to efficient purchasing, is an important practical reason why virtually all well-managed companies maintain some kind of stock-control records.

Specifications. If the item requisitioned is not available in stock, a purchase order must be placed. Sometimes specifications accompany the requisition. The specifications are simply a detailed, specific. and, frequently, technical statement of the quality of goods wanted. Dimensions, chemical content, construction, and many other units capable of exact determination and measurement make up the specifications. When the goods are ordered, the vendor is sent a copy of the specifications with instructions to adhere to them within certain definite limits. When the material is received, the specifications are used as a basis for checking quality or content.

Information regarding sources of supply. One of the most important office management problems of the purchasing department is to keep the records and other sources of information so that the department knows at all times not only with whom purchase orders have been placed in the past but also who else is a possible supplier. For example, assume that additional office space is being taken and that the purchasing agent receives from the office manager requisitions for carpets, linoleum, electrical fixtures, and office furniture. Such items are not purchased frequently, so it is unlikely that the purchasing agent will know offhand the names of several vendors of carpets, linoleum, and so on, and that he will know exactly what they offer, and the probable price ranges. Yet without doubt sales representatives of several such concerns have called on him within the past year or less. All of them have left business cards, and doubtless some, at least, have subsequently sent catalogues and other sales literature.

Obviously the purchasing agent must have all such information regarding possible sources of supply quickly available. Some companies have very complete systems of numerical and alphabetical indexes in which all items purchased are classified by products,

such as automobiles, trucks, and tractors; coal; oils and greases; rope and cordage; wire goods, and so on. In such cases each product is assigned a number. A subsidiary alphabetical classification is then made of each supplier of each product. In one purchasing office which follows this plan there are thirty-eight sections of the numerical index, while the alphabetical index contains over 5000 items. Some companies go to the other extreme and have little or no written information systematically organized, depending largely on the local classified telephone directory when possible suppliers must be found quickly for an item infrequently purchased. The discussion in the following sections assumes that a reasonable middle course will be followed.

Contracts. When an item is purchased regularly, a purchase contract is often made with one or more vendors. Contracts are of many kinds, ranging from a definite agreement to purchase a certain quantity at a certain price within a certain time, to an agreement to protect the price against market changes for a definite period. In any case contracts require a written agreement, usually in duplicate, signed by both buyer and vendor, each retaining one copy. The contract itself is frequently a printed form containing those features that are common to all contracts and providing ample space for typing in the special features of individual contracts. On the other hand, some buyers sometimes feel that there is so much variation in these contracts that it is just as easy to type contracts complete. If this is done, care must be taken to maintain accurately worded general agreement clauses, prepared by the legal department. Certain other agreement clauses for specific commodities need to be just as carefully worded. Especially where the entire contract is typewritten, it is well to preserve a paragraph book with master copies for all such paragraphs. In this case the buyer dictates each contract, using the paragraph book as his guide.

The contract record. In addition to the contract file, a contract record must be maintained. The contract itself usually covers a commodity class, such as lumber, steel, and so on. Since it may call for the purchase of a certain quantity, regardless of dimensions and other specifications, within a given time, a record of purchases against each contract must also be kept. The purchase record card, which is discussed in a subsequent section, gives the story only with regard to a particular item, so that each contract purchase must also be posted to the contract record to accumulate total purchases (see Figure 37).

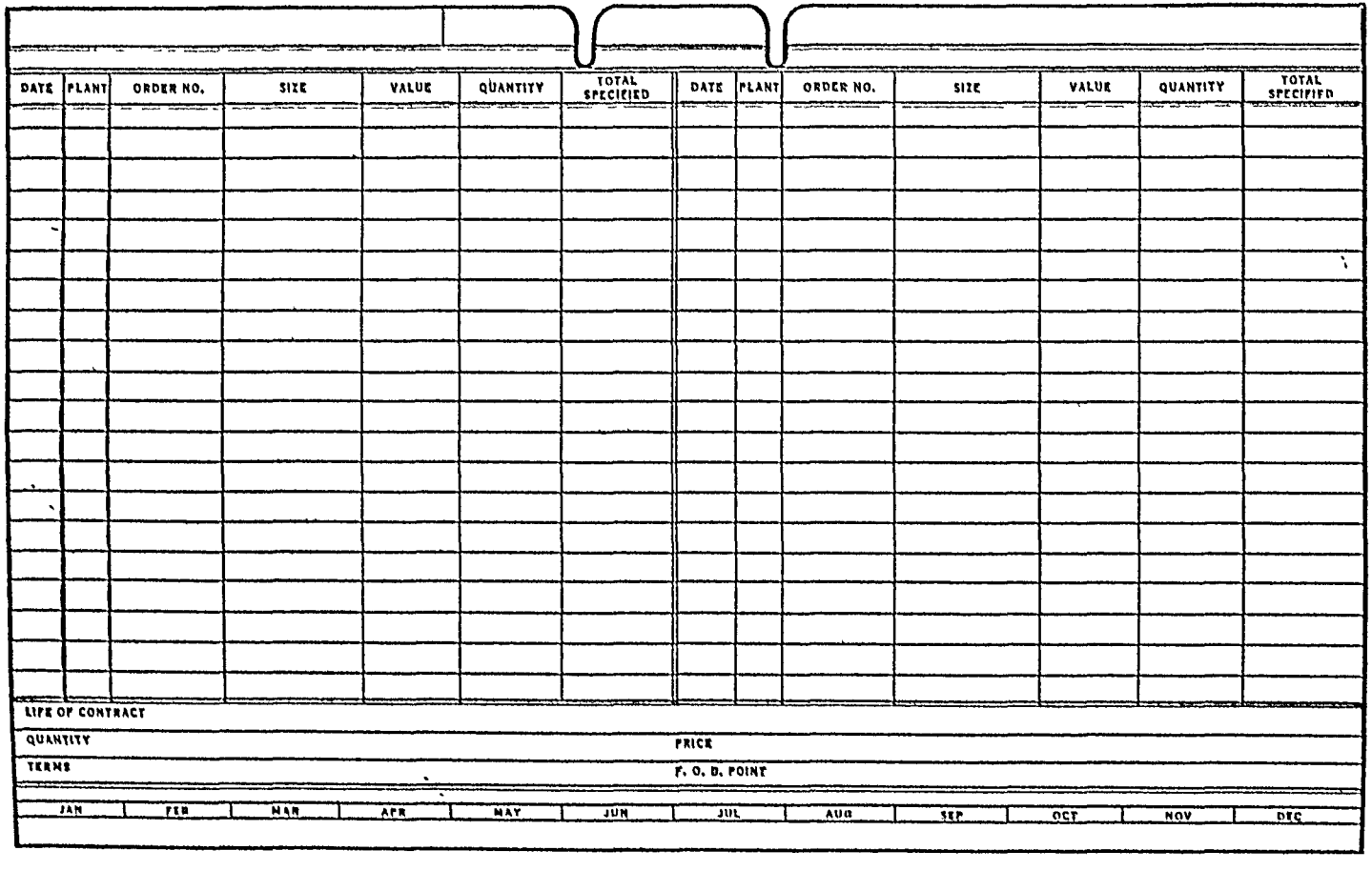


Fig. 37.—Contract Record.

The contract record is often supplemented with work sheets to accumulate details, because of the large number of purchase orders which may apply against it.

Make-and-hold agreements. Another form of contract record, usually in addition to the contract and yet preliminary to the purchase order, is the "make-and-hold" or "mill-stock" agreement under which the vendor agrees to make a certain quantity of product to the buyer's specifications, and to hold it a certain length of time, the buyer to order out in smaller quantities at various times for individual plants.

A file of make-and-hold agreements similar to the contract file may be used for the agreements themselves. A make-and-hold record may be used also in a file similar to the contract record. Make-and-hold or mill-stock records differ from purchase records in that they must show unapplied balances still at the mill; also they usually require the analysis of purchases by plant or destination. This is easily accomplished on the record card or by work sheets similar to those used on the contract record.

Catalogues. The catalogue files generally contain valuable information on out-of-the-ordinary commodities. In fact, a fair percentage of catalogues and pamphlets are filed, not because the commodity is frequently purchased, but because the purchasing agent feels that some day he may be called upon to purchase the commodity described in the catalogue or pamphlet.

All catalogues should be indexed alphabetically under firm names, and if there is a quantity of them, a sectional index also should be maintained. It is desirable that one member of the staff of the purchasing department be held responsible for the care and filing of all catalogues. It is also advisable, for identification purposes, to have all catalogues marked *"Property of Purchasing Department,"* especially where other departments have catalogue files.

The inquiry. As a general rule there are two classes of inquiries, one in connection with goods for which requisitions have been received, and the other covering miscellaneous requests for quotations to be used for estimating purposes, which may or may not result in actual requisitions and orders. Under this latter heading may be included requests for quotations with a view to placing contracts.

The general opinion is that printed inquiry forms sent out in duplicate or triplicate are preferable to letter inquiries, as the printed form is designed so that when it is properly filled in, all

the information necessary to place the business is available (see Figure 38). It is important, when deciding where the order shall be placed, to consider the quality of the goods in question and all charges that may affect the laid-down cost, such as transportation, duty, sales tax, trade and cash discounts, as even the item of cash discount alone often is a deciding factor in placing the business. When such inquiries have been sent out, the requisitions should be filed in a pending file. As this file is never very large, it is comparatively easy to follow up the non-receipt of quotations.

Quotations. Quotations are obviously important and valuable not only in connection with the specific order that necessitated the inquiry, but also with regard to future action in purchasing similar commodities. There is, however, some difference of opinion as to the most efficient method of filing quotations. Some purchasing agents prefer a separate quotation file arranged alphabetically, based on the names of the materials on which quotations have been received. Others prefer a similar file, except that the successful quotation is filed numerically under the order number, together with all other papers in connection with the order. Still other firms file all quotations together with all correspondence relating to a specific order numerically under the order number. Obviously this is a matter to be determined by the circumstances of each case.

The purchase order. We now come to the purchase order itself. In making out these orders the typist consults the requisition and quotation for the vendor's exact name, address, and terms, the exact wording of the specifications, the quantity, price, delivery, and so on. As many copies as are required by the business will be made and, in most lines, the same number of copies will be used in every instance. A typical distribution of copies of the purchase order is as follows:

Vendor's copy.
Acknowledgment copy (often retained by the buyer as a follow-up copy).
Buyer's numeric or alphabetic copy.
Commodity file copy.
Branch buyer's copy.
Receiving copy.
Accounting copy.

Stores or warehouse copy.
Stock control copy.

Summary of purchasing department procedure. Most of the department's authorizations to purchase originate with individual requests or requisitions. The commodity file for the material on the requisition is sent to the buyer, along with the requisition and whatever open quotations may be available. Each request reaches the buyer with complete purchase information attached, so that it can be acted upon promptly.

The buyer next makes his decision and instructs his typist. If the typist is to send out an inquiry or request for bids, she makes as many copies as required, preserving one and sending two to each vendor indicated, while her copy of the inquiry goes to a follow-up file. Vendors retain one copy of the inquiry and return one as a bid, which is attached to other bids in the follow-up file. When the closing date arrives, the bids go to the buyer, who indicates the vendor and instructs the typist to prepare a purchase order. Bids are then filed either in a body in the quotation file under the proper commodity name, or with other correspondence by the name of the vendor. The typist then enters the purchase order on the purchase order register and distributes the purchase order.

Cancellations and change orders follow the same routine, affect the same records, and require similar forms. Merchandise rejections and returns reverse the procedure and affect most purchasing department records. Changes of price must be authorized by the purchasing department on a change order or similar form.

Purchase and control of office equipment and supplies at American Brake Shoe Co. The following description of the practices of the American Brake Shoe Co. is interesting, not only from the point of view of purchasing, but also because it involves office supplies and equipment.[2]

Whether the specialists who staff the Purchasing department of the American Brake Shoe Co. are buying paper clips or a locomotive for the company's nine divisions and fifty-nine plants throughout the country, their first consideration is efficient performance. The department's

[2] Buckley, G., "How American Brake Shoe Buys for Office Needs of 59 Plants," *Office Management and Equipment*, May, 1946, p. 35.

requisitioning, the plant purchasing agents indicate certain models or a choice of type that the local salesman has demonstrated. Such preferences are followed as far as possible, if the make is an approved one.

If the local salesman has demonstrated equipment, his interests are carefully regarded, although the purchasing department places the order with the manufacturer. A copy of the order is at the same time sent to the salesman in the plant neighborhood. This cooperation gains the good will of the local salesman, essential to the local plant agent in obtaining prompt, efficient servicing of the new machines.

Sometimes local plants buy used machines or one or more pieces of furniture, when advantageous. These, like all purchases, must be referred to the main purchasing department for authorization if over a certain amount.

An extra copy of every purchasing order that a local plant sends out is forwarded to the central purchasing department. Here one man includes in his duties the checking of all such orders, for conformity to the department's policies. If the order is for a used business machine or for office furniture that the local salesman has available, the department may inquire about the condition of the articles before approving.

Office management and purchasing. The foregoing example is interesting also because of the role the purchasing department assumes in testing office equipment and establishing standards. However, in most cases this plan does not work well because the purchasing agent or buyer must procure thousands of items and, consequently, cannot be familiar with all of them. Further, very few purchasing departments have established methods of testing and setting standards for office equipment. A Dartnell Survey [3] in 1943, covering 250 offices, found that the answer to lower office costs as related to equipment was close coördination of the efforts of the office manager and the purchasing agent—the former to prepare specifications and develop standards for equipment and supplies, the latter to procure the equipment and supplies at the best price consistent with such specifications.

Purchasing procedure in a steel-manufacturing company. The purchasing practice of a large manufacturer of specialty steels will serve as an example of the part office practice plays in the purchasing function. In this case, the control of purchasing is centralized at Pittsburgh. The general offices of the company are located in New York and there are some seven or eight plants located in the northeastern part of the country. In addition, there

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[3] Anon., "The Office Manager and the Purchasing Agent," *American Business*, August, 1943, p. 24.

are some thirty branch sales offices located all over the United States.

Plant purchasing procedure. Representatives of the purchasing department are located at each plant and purchases are made both from local vendors and through the central purchasing department at Pittsburgh. The procedure is as follows:

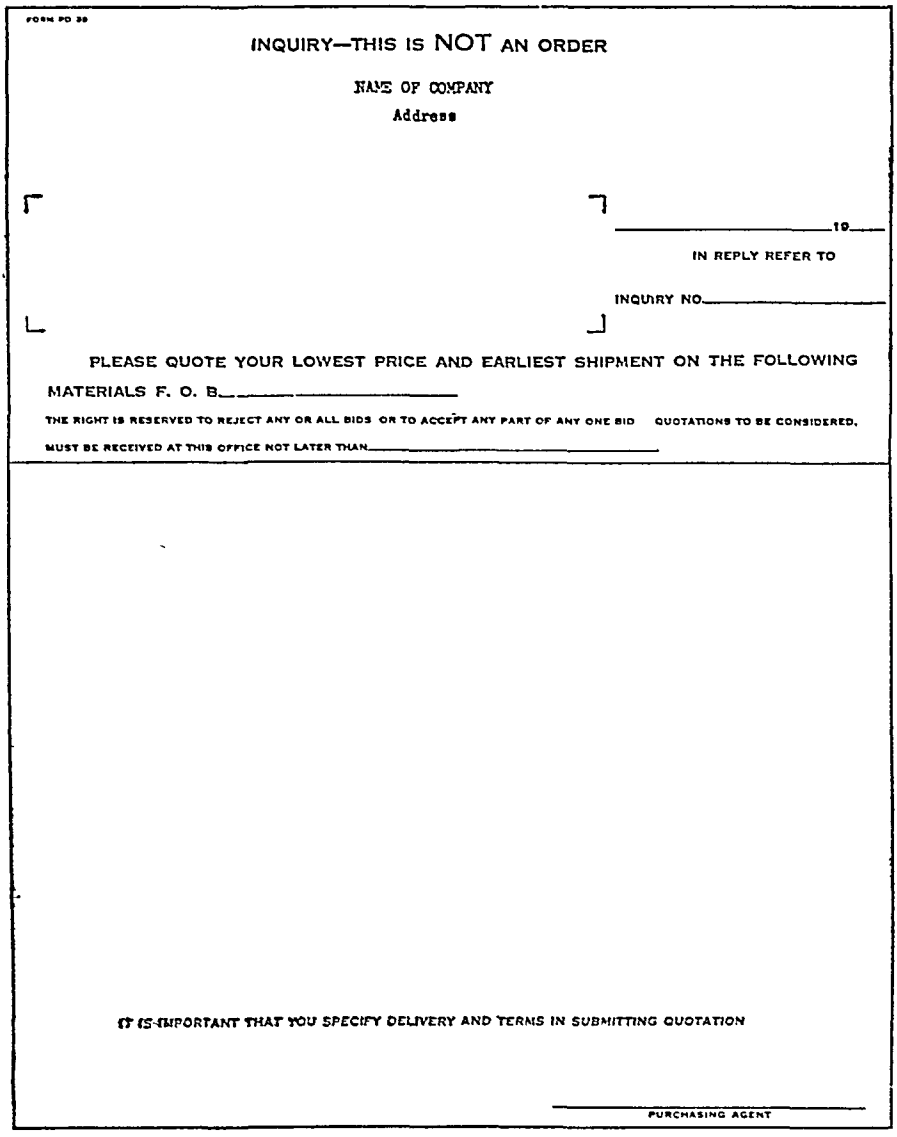
The need for material may arise in several ways. The storeskeeper may find it necessary to replenish his stock, or some employee in the plant may need a certain item. In either case, a purchase requisition is initiated. This requisition is illustrated in Figure 35. Only one class of material may be listed on a requisition. The classes have been established by the purchasing department and a listing of these classes distributed to all employees who find it necessary to initiate requisitions. This is done so that when the purchase orders are written they carry this classification, and copies of them can be filed in a commodity file.

Upon completion of the requisition, which must contain the quantity of the item required, together with accurate specifications of the material, it is forwarded first to the storeskeeper (if he has not originated it), and thence to the general superintendent or works manager. The storeskeeper must approve it so that material already in stock will not be purchased, and the works manager or superintendent must approve it from the point of view of the control of material and expense.

After the requisition is properly authenticated, it is forwarded to the plant purchasing department, where it is processed or from where it is sent to central purchasing in Pittsburgh, in accordance with previously established policy for the material in question. The following procedure is the same in either case.

Inquiries are sent to vendors asking them to submit bids covering the material on the requisition. If possible sources of supply are already known, the inquiries can be typed at once. If they are not known, it is first necessary to locate them. Figure 38 illustrates the form of inquiry used. It is sent in triplicate to each possible vendor, and the vendors are asked to return the original and one copy with the desired information, or to submit a separate quotation in duplicate if they so desire. The body of the inquiry contains the information which appeared in the body of the requisition. Two copies of each quotation are requested so that the purchasing department may retain one, while sending the other to the

originator of the requisition, should the purchasing department desire the advantage of his advice or preference.



FORM PO 39

INQUIRY—THIS IS NOT AN ORDER

NAME OF COMPANY
Address

_____ 19____

IN REPLY REFER TO

INQUIRY NO._____

PLEASE QUOTE YOUR LOWEST PRICE AND EARLIEST SHIPMENT ON THE FOLLOWING MATERIALS F. O. B._____

THE RIGHT IS RESERVED TO REJECT ANY OR ALL BIDS OR TO ACCEPT ANY PART OF ANY ONE BID QUOTATIONS TO BE CONSIDERED, MUST BE RECEIVED AT THIS OFFICE NOT LATER THAN_____

IT IS IMPORTANT THAT YOU SPECIFY DELIVERY AND TERMS IN SUBMITTING QUOTATION

_____
PURCHASING AGENT

Fig. 38.—Inquiry.

When the bids have been reviewed and compared, the buyer decides which of the vendors will get the order and passes the requisition and the bid of the successful vendor to a purchase order clerk, who prepares the formal purchase order. Upon completion of the purchase order, it is checked and then signed by a member of the purchasing department authorized to do so. Various copies of the purchase order are distributed: two to the vendor, one of which

is an acknowledgment to be returned by him; one to the central purchasing office or to the plant purchasing office, depending upon where the purchase order was written; one to the storeskeeper; one to the originator of the requisition; and one to the accounts payable division of the company. Upon receipt of the material, the storeskeeper checks the material received against the copy of the purchase order, and, if everything is in order, either initials his copy of the purchase order or makes out a receiving report, sending one or the other to the accounts payable division to await the arrival of the invoice.

Invoices are requested in triplicate and are sent to the accounts payable division. One copy is sent to the buyer who placed the order, who is responsible for checking the price and the quantity against the purchase order and the vendor's bid. The second copy remains in the accounts payable division, filed in a tickler file which will bring it to attention in sufficient time so that the company will not lose its discount. (In plant procedure, the third copy is not used and is destroyed.) When the buyer has checked the invoice and returned it to the accounts payable division, this copy is matched against the purchase order and receiving report already in the file and, if everything is in order. the invoice is paid.

Branch and general office purchasing procedure. There are no buyers located at any of the branches or at the general offices in New York, all purchasing for these points being centralized at Pittsburgh. The procedure follows somewhat that of the plant procedure mentioned above, except that the office manager in the general offices and the various branch managers perform some of the functions of the purchasing department, in so far as negotiating for sources of supply is concerned. It must be remembered that most of the items requisitioned by the branches and the general office are of the nature of office supplies and equipment. Requisitions for all office forms must be cleared through the office manager at New York. so that the forms standardization and control program will not be by-passed. Branch requirements for other stationery items are lumped together and purchased from Pittsburgh and shipped by the vendors directly to the branches requesting them. Many items of stationery, notably forms, are purchased on a contract basis, and the vendor retains the entire supply, shipping to the various locations as requested.

The general procedure is that the branches send requisitions to New York, where they are passed upon by the office manager,

and, if in conformance with the standards established for office supply items, these requisitions are forwarded to central purchasing. A purchase order is written requesting the vendor to release the required amount of the commodity to the branch. A copy of this purchase order goes to the branch and another copy to the accounts payable division. Upon receipt of the material, the branch will inspect it and if it is in the proper quantity and in good order, it will place it in its stock and initial its copy of the purchase order. When the invoice is received, one copy is forwarded to the branch, which compares it to the purchase order already initialed, signs the invoice denoting receipt of the material, and returns it to the accounts payable division. The second copy of the invoice is forwarded to central purchasing to be checked against the purchase order and the vendor's bid. The third copy remains in the accounts payable division until the other copies are returned by purchasing and the branch. If everything is in order, the invoice is paid.

The description of the above procedures, of course, has been simplified a great deal for the purpose of emphasizing the major steps. Actually, purchase orders play a major role in the cost system and additional copies are routed through production control and cost accounting. A description of this process, however, is not necessary here.

In this chapter purchasing department records and procedures suitable for a medium-sized or large company have been discussed. It should be understood clearly, however, that the specific requirements of each concern naturally will necessitate changes from the methods here discussed. The main point that the office manager should constantly keep in mind is that efficient purchasing department organization and operation necessitate constant attention to details. Whether his responsibility is direct or only functional, the office manager should assure himself that the system used is adequate—and entirely practical—for the needs of his company.

14

Office Management in the Credit and Collection Department

The main objective of good credit management is to assist the company to realize maximum profits from its operations and, at the same time, to minimize the losses. All assistance possible must be rendered the sales department in its efforts to open new accounts and to expand the volume of sales to the current accounts. However, unsound extension of credit will defeat this objective, since it can encourage over-expansion on the part of the customer and, very possibly, spoil a previously sound account. The granting of credit to unsound prospective customers results in losses to the company, and the efforts of the sales department in securing these prospects are wasted. Furthermore, the credit manager can promote good will by his diplomatic handling of delicate credit situations, thus assisting the sales department materially.

To attain such an objective, many decisions must be made daily and each one must be based upon facts. A refusal of credit based upon inaccurate reports is just as serious an error as the unsound extension of credit. The course of the credit manager must follow a delicate line, and the accuracy required makes an adequate system of reliable records essential to successful operation. The nature and extent of the records needed depend upon the type of business. Many department stores, for example, have only charge accounts, in addition to their cash business, and sell nothing on the installment plan. Other concerns sell on an open account and on installment, as well as for cash. Some organizations deal directly only with consumers; some, such as the Commercial Credit Corporation and the Universal C.I.T. Credit Corporation, deal with manufacturers, wholesalers, and retailers, as well as with consumers. Whatever the exact relationship may be, it should always be remembered that credit is a very personal matter. Conse-

quently, it is of the utmost importance that the record system be as nearly automatically accurate as possible. The honest person who pays his bills promptly when they are due resents nothing quite so much as to be told, through an error, that his bill is in arrears.

"Project Credit Plan" of United States Plywood Corporation. The following example serves to indicate the extent to which credit service may extend. It is unusual as far as normal business practices are concerned, but it does illustrate how the extension of credit may serve as a powerful sales weapon.[1]

If a man satisfies the corporation that he is of good character, and possesses or can command some skill in the use of its products, he is permitted to seek contracts from approved customers. He is then provided with the merchandise and, if necessary, the money needed to meet his payroll. The amounts to be involved and the number of jobs he may take depend upon the company's judgment of his ability and of the soundness of his projects. The help and advice of staff architects and engineers are provided by the company without charge.

Thus the man will have materials with which to work, money to pay his labor, and an assurance that he will come out with a profit if the project is handled efficiently. Once a contract has been secured, the customer makes payments direct to the contractor as the work progresses, and the company estimates the portion of each payment which must be returned to it to cover the materials supplied and the money advanced.

The contractor acts as the company's agent in collecting such sums, having executed an assignment form with it. To avoid embarrassment to the contractor, the assignment is not revealed to his customer, as it might interfere with his ability to get work in substantial volume. There is some doubt of the legal validity of such assignments if not immediately presented to the customers, especially as some business houses stipulate that no assignments may be made, but that is a chance which the company is willing to take because it has been found that the percentage of those who violate this type of agreement is small.

The "Project Credit Plan," incidentally, has been operating effectively since the depression of the 1930's, when many of the corporation's smaller accounts were unable to function.

Obviously, the successful operation of such a plan necessitates credit management of the highest order.

Importance of office mechanism. Smooth, swift, and efficient office operations are essential to good credit management. Pro-

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[1] Anon., "Project Credit Plan," *Management Review*, American Management Association, November, 1944, p. 410.

fessor Albert F. Chapin makes this comment about the office mechanism: [2]

To describe a credit office system which may be adapted to more than a very small percentage of businesses is clearly impossible. But the importance of system is stressed. This embraces the most efficient mechanical aids, carefully selected and well-trained assistants, and a carefully planned routine. The saving of time is a cardinal principle in credit office management. The true executive does not permit himself to be hampered by inefficient office methods, or by details which can be shifted to an assistant. The executive is constantly alert for improvements in equipment, yet he guards his department against too much system. Red tape has no place whatever in a credit office.

Initial costs for new systems at times appear to be heavy, and yet the most radical installations sometimes will pay for themselves in a short time. The aggressive and successful enterprise does not hesitate to throw out either its machinery or office equipment when either becomes obsolete. Once the question "will the new equipment save time, labor, or space sufficient to cover the expense of installation" is answered in the affirmative, the executive can go ahead with confidence.

Two types of credit operations. Although the main objectives of all credit procedures are identical, there is a distinct difference in the procedures and systems used to accomplish these objectives in a manufacturing or wholesale house and in a retail store. In the former case, the credit is advanced upon the belief that the buyer will realize a profit from the handling of the purchase and repayment will arise from this profit. In the latter case, the credit covers items sold (consumer goods) or, perhaps, cash loaned, and repayment must come from income entirely unconnected with the product. The difference is important, for the sources of information regarding the credit risk vary between wholesale and retail credit and the records and procedures necessary to form a basis for the credit also differ.

Records the credit department needs. The nature of the records kept by the credit department depends to some extent upon the sources used by the credit manager to secure information about applicants for credit, or upon the nature of the applicant's business and the extent to which credit is granted. In general, the records maintained by manufacturers and wholesalers are more extensive than those of the retailer or loan company. Mercantile credit

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[2] Reprinted by permission from *Credit and Collection Principles and Practice*, by A. F. Chapin, copyrighted, 1941, by the McGraw-Hill Book Co.

involves more detailed and more frequent investigations than does retail credit. Consequently, the volume of material to be organized is greater and the methods of using it demand a higher degree of systemization. The records discussed below are those frequently found in mercantile credit operations.

Request for credit information. When the sales department obtains a new customer, and frequently also in the case of a prospect, the first step in the granting of credit is to provide the credit department with the information it requires to make a credit decision. The request for credit information or credit data sheet is frequently used.

FORM TD 64*

CREDIT EXAMINATION SHEET - OFFICE USE

DATE_____

In opening new accounts please secure the following information along with any other facts which would aid us in establishing a line of credit.

CUSTOMER _____

ADDRESS _____

BUSINESS _____

HISTORY _____

_____

FINANCIAL INFORMATION:-

1 Do they have a statement available?_____

2. If not what are total assets?_____Total liabilities?_____

3 " " quick " ? _____ Current " _____

NAME OF BANK _____ ADDRESS _____

1 Do they have a line of credit with banks if so on a secured basis and what is character of their borrowings? _____

_____

_____

NAMES OF TRADE REFERENCES

1_____ADDRESS _____

2_____ADDRESS _____

3_____ADDRESS _____

Where have they been buying steel in the past?_____

What are their annual requirements in our line? _____

Do they sell jobbers or direct to manufacturers & users? _____

RECOMMENDATIONS AND REMARKS _____

_____

_____

_____

_____

By _____

Fig. 39.—Credit Examination Sheet.

This record may be merely a form letter sent by the credit department, in which it is requested that both general and specific information be furnished regarding the applicant in question. If, for example, the proposed sale is to be made to an individual and involves less than $100, all of which will be payable within thirty days, nothing more than personal and bank references may be required. On the other hand, complete financial statements, including both a profit and loss statement and a balance sheet, may be asked for, particularly if an installment sale involving a considerable amount of money is concerned. For example, a concern may wish to purchase $50,000 worth of machinery or equipment, proposing to pay $10,000 (20 per cent) in cash at the time of delivery, payment of the balance of $40,000 to be spread equally over the next twelve or eighteen months. Under such circumstances the customer's ability to pay the installments obviously depends primarily upon his future earnings; hence complete information regarding his financial status is essential.

The form illustrated (Figure 39) serves the same purpose, but it is not sent to customers by the company that uses it. It is used to collect information when contact is made by telephone or when salesmen obtain bank references, and so forth, directly from the customer. It records the first contact with the prospective customer and is a work sheet from which information is later developed.

Customer's credit file. The customer's credit file, or credit information file as it is sometimes called, is the basis for all credit decisions in the mercantile field. It is usually a vertical file folder of letter size, housing all the material for one account. It may have a printed form on the front cover which contains an abstract of the material within it. The method of filing may be alphabetic, geographic, or numeric.

Such a folder would contain the request for credit information or credit data sheet, together with agency reports (Dun & Bradstreet, for instance), copies of the debtor's current balance sheet and profit and loss statement, confidential reports from banks and other vendors, and the important letters having a bearing on the customer's credit rating. It is the usual practice to retain these files permanently, for their value increases in proportion to the history which is built up within them. For this reason, letters and papers of limited interest, such as copies of collection letters, invoices, and monthly statements, are usually filed in a separate

correspondence file in order not to clutter up the credit file. The credit file is reviewed periodically, since business conditions are constantly changing. It is the usual practice to revise these files every six months or so, checking to make certain that the information regarding the customer is up to date. If any is lacking, current information is requested from the customer and from whatever other sources were used previously.

Correspondence file. As mentioned above, some firms maintain a separate correspondence file for general credit correspondence with the customer. In some cases the contents of this correspondence file is sent to the general file as fast as the credit department is finished with it. In other cases the correspondence file is reviewed periodically, obsolete papers are destroyed, and those which have developed permanent interest are transferred to the customer's credit file. In other cases no separate correspondence file is maintained and these routine letters are immediately filed in the credit file. Although, as was pointed out above, this has a tendency to add bulk to the credit file and make reference more difficult, it does have the advantage of centralizing all information about the customer in one file.

Other records. Most mercantile credit departments frequently find it necessary to refer to copies of invoices and to the customer's ledger. Both records, consequently, must be made available to the credit department, the usual practice being to locate the credit department adjacent to the accounts receivable section of the accounting department, so that these records will be readily accessible. When such coöperation between accounting and credit can be established, duplications of these records are unnecessary. In some cases, however, this arrangement cannot be worked out, and for this reason, or because he needs more detailed information than the accounts receivable will yield, the credit manager maintains a record of customer's purchases and payments.

Record of customer's purchases and payments. In a previous chapter dealing with the records of the sales department, mention was made of the customer's record card, the primary purpose of which is to record sales made to different customers. The credit manager needs substantially the same information, but he naturally carries the customer's relations with the firm one step further—that is, until the goods have been paid for.

The record of customer's purchases and payments usually has three main columns, one for purchases, one for payments, and the

third for balance due, if any. Under each of the first two main columns there are a number of subcolumns for entering such information as the order number, date of the order, value of the order, date when payment was due, date when payment was actually made, explanation of late payments, and so on. A separate series of entries may be made for each order, or all information may be shown on a monthly basis, depending largely upon the nature of the business. The customer's record of purchases and payments should not be confused with the ledger account, which is merely a list of debits, credits, and reference numbers and cannot give such complete information about the relations of the company with each customer. Neither is the customer's record of purchases and payments expected to serve as a record of collections received from customers whose accounts are past due. Its purpose is simply to give a clear picture of the paying habits of the firm's customers.

Procedure in granting credit. As pointed out previously, no two offices handle credit details in exactly the same manner. The general routine, however, is somewhat similar. In most cases orders from present customers take precedence over any other activity of the department. In considering a customer's order, if orders from him have been filled frequently, a decision may be made without reference to the files because of familiarity with the account. The size of the order may also influence this, as a small order may be approved with little or no investigation. It is generally necessary, however, to refer to the credit file to see if the account is in good standing and to the accounts receivable ledgers or to the record of customer's purchases and payments in order to determine whether this order will exceed the credit limit. Since one of the most reliable sources of information about any customer is experience with him, the credit manager will be favorably or unfavorably inclined according to the nature of that experience. No firm rules can be established, but the following indications are of extreme interest to the credit man:[2]

1. Account past due. This is the commonest occurrence.
2. Cash discount taken after time allowed; evidence of dishonesty.
3. Check for less than amount due, marked "paid in full." This must be handled carefully.
4. Delay in presentation of claims for shortage, damage, or defective quality.
5. Cancellation of orders or of parts of orders.
6. Unusual volume of credit inquiries from other houses about this customer, especially on first orders.
7. Abnormal increase in number and size of orders.
8. An unusually large order from a slow-pay customer who has recently been paying promptly.
9. Fire under suspicious circumstances. To the credit man, no fire is "successful."

In general, if the ledger experience is favorable, the order will be passed. If any doubt arises, a complete study of the customer's credit file will be made before passing the order.

Handling new business. In most cases, the credit manager or his assistant will want to see orders for new business and after examining them will indicate what information should be secured. A clerk is instructed to obtain this information, which may include mercantile agency reports, bank information, financial statements, and statements from other vendors. The degree of completeness of the check-up will depend to some extent upon the size of the order. When this information is obtained, a customer's credit file is set up for the account and future orders from this customer are handled as indicated above.

Collection of accounts. The function of collection of accounts is most important and has a distinct bearing upon the success of the entire credit operation. Although accounts are expected to be paid when payment is due, in practice some sort of demand is frequently necessary to insure payment. This demand may range from the monthly statement which is automatically sent when payment has not been received, to the threat of a law suit, the degree of severity of the reminder depending upon the length of time the account is owed and the attitude of the customer. The meticulous follow-up of unpaid accounts, even beyond the period of the statute of limitations, frequently pays, as the following examples indicate: [4]

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[4] Mikesell, J. B., "Dollars in Past Due Accounts." *American Business*, January, 1945, p. 20.

is not paid by a certain date, it will be turned over to an attorney or collection agency.

Collection card. The essential record of the collection division is one which shows the exact status in the collection process of all past-due accounts. A record often used for this purpose is a simple collection card. A separate record is kept for each customer. The top of the form provides for the usual information, such as name, address, and so forth. The body of the record provides for entering the various notifications, requests, and letters sent to the customer. One method often used is to assign a number to each such letter or request and print it on the form itself. As the notices are sent out, the date on which each is sent is entered opposite the appropriate number. In order to make possible an automatic follow-up of any given account at a definite future date, a series of numbers, 1 to 31, each indicating a day of the month, may be printed across the top of the card. Thus if notice No. 2 is sent out on the tenth of the month, and it is desired to send notice No. 3 on the twenty-second, provided, of course, that payment has not been made by that time, a tab may be put over the number 22 at the top of the card. The card can then be filed with the other collection cards in the regular way, but will automatically be brought to the attention of the collection follow-up clerk on the twenty-second. Figure 40 shows a typical form of collection card.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Name		Address	
Notification	Date Sent	Final Action	Remarks
1			
2			
3			
4			
5			
6			
7			
8			

Fig. 40.—Collection Card.

An important part of a systematic procedure for handling collections is a definite plan of coöperation between the collection and accounting departments whereby notice will be sent promptly to the collection department just as soon as money is received from an account. In smaller concerns this is often handled by sending all checks, as soon as they are received, directly to the credit and collection department. Here they are posted at once to the Customer's Record of Purchases and Payments, after which they are turned over to the accounting department for entry and deposit. In large companies the accounting department may prepare a daily summary of all payments made on accounts receivable. If some such plan is not followed, confusion within the organization

will result, as well as ill will on the part of the customer, if he receives a collection letter covering an invoice or bill that he has already paid.

Retail credit. Inasmuch as credit management is based on an estimate of the customer's ability to pay for the merchandise from income other than that derived from the use of the article, the procedure used in establishing a basis for credit is slightly different. The retail credit manager has at his command the use of a number of credit agencies specializing in investigations of individuals. The Retail Credit Company is a national agency organized to assist the credit managers of retail stores, installment houses, small loan offices, and so on. Nearly every major city has a credit bureau from which all the subscribing department stores may obtain credit information quickly. This is important, because frequently customers desiring to open charge accounts wait in the store until the credit is cleared. An example of the efficiency with which these organizations operate is illustrated below: [5]

> Here's how the Credit Bureau of Greater New York, Inc., one of the largest credit information agencies, enters the picture when a customer goes into a department store to make a purchase and says, "Charge it."
>
> The customer's name is written by the store credit manager on a Tel-Autograph transceiver connected with the Credit Bureau's main office. Credit rating of the customer is then flashed back to the store and the purchase is okayed. The Bureau rarely takes more than 11 minutes to give the required information.
>
> About 3,000 requests of this type are received daily. With the increase in installment buying, it is anticipated that the number of inquiries handled each day may reach 7,000. To handle this heavy demand for quick credit inquiries, the New York Bureau has 11 telephone lines and 41 TelAutographs.
>
> Today there are approximately 33 New York stores using this service for immediate transmission in writing of credit analyses.

Records used in retail credit management. In general, the heart of retail credit management is the accounts receivable ledger, which is usually designed to include a system that will immediately call to the attention of the credit manager any account upon which payment is not received. In installment selling, the conditional bill of sale or purchase agreement forms the legal basis upon which the retailer may collect his money, and this, of course, is filed away carefully; but the activity of the account is checked

[5] Anon., "System Speeds Credit Information," *American Business*, October, 1946, p. 36

from the ledger generally according to the scheduled payment date. As soon as that date passes without payment, the account is followed. The following example indicates how the American Trust Company keeps track of its installment loans.[6]

Recognizing the trend in commercial banks toward the acceptance of all types of consumer credit, we established in 1935 a special department to handle this kind of business in our bank. Formerly we had granted instalment loans to individuals as personal loans and automobile loans but had carried them in our commercial note department; the impetus given instalment lending by the introduction of FHA Title I soon expanded our volume to the point that a separate department became a necessity.

Our bank has over sixty offices and when we first transferred our instalment loan business to a separate department within the bank, each office was permitted to carry over to the new operation such features of their commercial loan operation as they felt desirable. Because of the wide variation in volume and types of activity, many radically different systems of posting developed, ranging from hand posting in smaller offices to machine posting in those offices having a greater volume. In the Berkeley office we simply carried over our commercial loan method of posting each loan card by hand. Although this worked satisfactorily for a short time, it soon became apparent that it was inadequate to handle our volume of business. Numerous efforts were made to improve this system but by 1940 the volume had increased to the point that an immediate change in our entire posting system became necessary.

Our problem in Berkeley was not unique, as nearly every other office had experienced the same growing pains. A committee was appointed by our Head Office in San Francisco to make a study of the various systems in use throughout the country. It was decided that whatever system appeared to be the most useful would be installed at our office on a trial basis. We were selected for this trial because the volume here was not so large as to make an experiment dangerous but still large enough to act as a proving ground for a system which might have to handle a volume of business many times larger. It was also determined that, should the system operate effectively at the Berkeley office, it would then be installed uniformly throughout all of our offices.

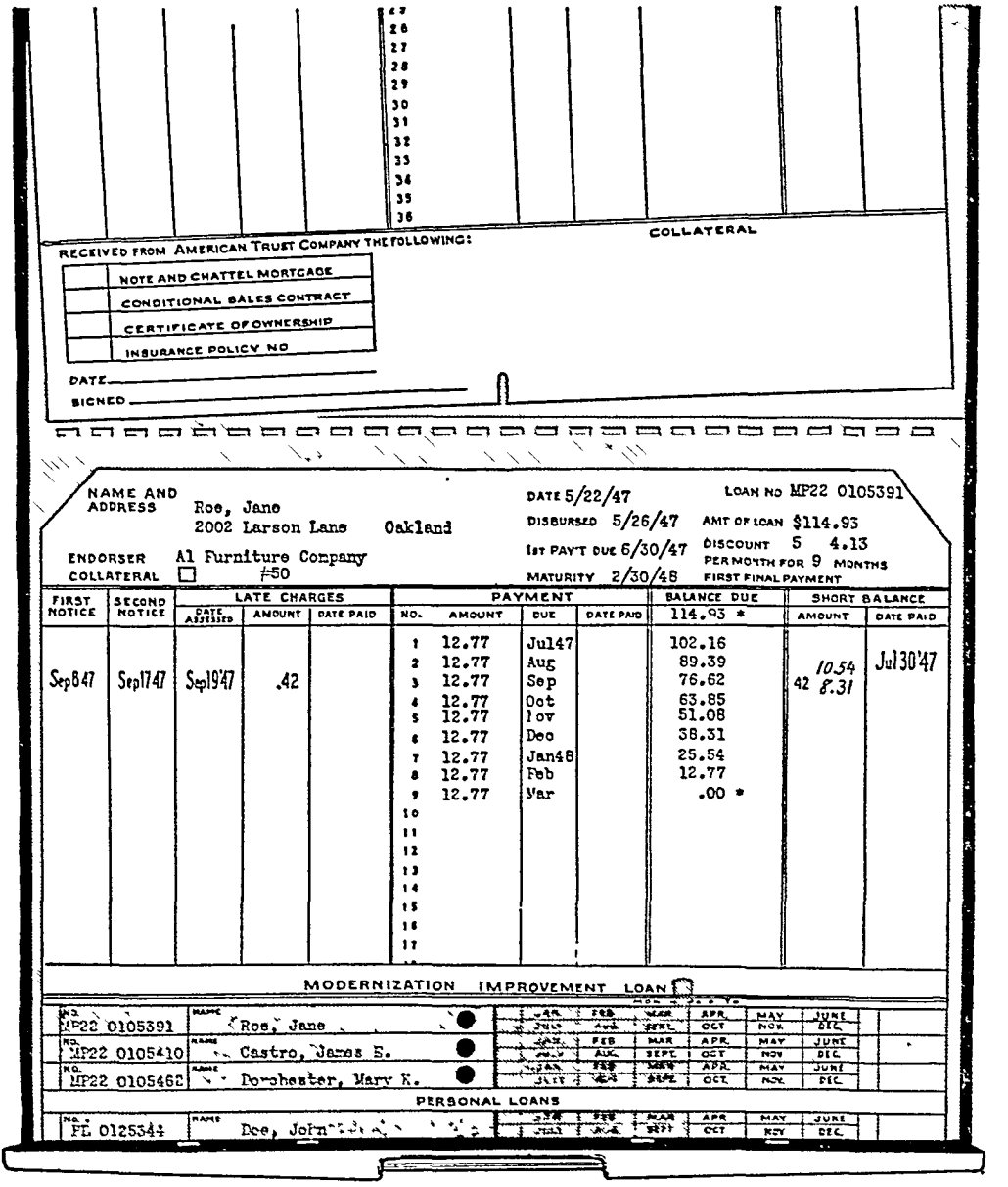

Fig. 41.—Installment Loan Record. Credit posting requires only the use of a rubber stamp. A colored signal instantly warns of delinquent accounts.

the payment book and results in a considerable saving of time and postage. The coupon becomes a credit entry to be run through our batches, and is then used by the bookkeeper in posting the payment on the ledger card. The coupon book contains appropriate instructions as to where and how to make payments and shows the date each payment is due. Of course, payments are occasionally tendered without the coupon book, but an index file, arranged alphabetically, provides a quick cross-reference to the account number.

The ledger card cabinets used are stationary, certified fire-resistive, and are provided with locks. As a result it is not necessary to move the ledger cards into the vault at night and we save not only the labor involved in this process but valuable vault space as well.

After five years of operation we have found this system to be entirely satisfactory. Our analysis indicates that one bookkeeper can handle approximately 5000 accounts, including the handling of routine delinquency notices. This high efficiency can be translated into terms of low operating cost. As a result of our satisfactory experience in this office, this system has been designated as the standard system throughout the bank.

Summary. In determining the records and the record-keeping procedure needed by a credit and collection department, too much emphasis cannot be laid on the fact that a systematic plan of procedure which will result in both promptness and accuracy must be worked out and maintained. Obviously the effectiveness with which this department is operated has a very direct bearing on the status of the working capital account of the company. In the opinion of many financial authorities, the maintenance of a proper working capital fund may spell success or failure for a business. Only by having an adequate system of record control in the credit and collection department will the greatest effectiveness of operation be secured.

15

Branch Office Management

Although branch offices often deal primarily with sales matters, the office manager frequently has many direct relations with them. In some concerns he has direct line control of the office work at all branches. In other companies the general office manager at headquarters is responsible for standardizing the office work at all branch offices, even though the local office managers report directly and only to the branch managers. And even in those organizations in which the general office manager has neither direct nor functional responsibility or authority for branch office work, he still must deal constantly with branch office reports and records as they affect the work of the main office. Thus, whatever the specific organization relationship between headquarters and the branches may be, branch-office management is an important part of the work of the average office manager.

Relationship of the office manager to the branch offices. Occasionally, studies of the relationship of the office manager to branch office operation have been made, but in most cases the results are not subject to clear interpretation and do not yield definite conclusions because practices seem to vary in different industries. Then again, the lack of definition of the home office manager's duties in industry as a whole seems to add to the difficulty of such studies. In general, very few business concerns give the office manager complete control of the branch offices. His role is advisory in most cases and frequently he has neither complete nor advisory control. Whatever trend there is seems to be toward decentralizing all functions which can be transferred out of home offices and toward placing the authority and responsibility for their operation as close to the point of operation as possible. This makes for a relaxation of complete and partial line control but strengthens the opportunity for advisory control by home offices and the benefits of specialization which advisory control brings.

Systems and procedures can be analyzed and improved by specialists who are not burdened with line responsibilities. In turn, a line supervisor at the branch office need not neglect current operating problems in order to plan office operations or procedures. He has the benefit of using the staff specialist whenever he wants to.

Classification of branch offices. Branch offices may be classified as follows:

1. Those that function as independent units, such as subsidiary companies operating in foreign countries. In this case one usually finds a complete unit comprising a factory, sales offices, and offices of other departments. If the branch is incorporated, all the transactions incidental to a complete corporate unit are present.

2. Branch sales offices where a specified territory or area is assigned for the distribution of the product. Here is found a complete branch unit—merchandise is purchased from the home office (at least theoretically); sales are made; customers' accounts are kept and collected; cash is banked and the expenses incidental to sales are paid; and the balance of cash is remitted to the home office. Such a branch may have sub-offices, in which case this type of branch takes on the complexities of a complete commercial unit.

3. In some cases the branch is a combination of agency and branch, the goods being shipped on consignment and the manager being treated as an agent or dealer who owns the business (at least theoretically). In this case accounts receivable are kept at the home office.

4. A retail store where goods are sold for cash or credit or both. Income is remitted currently to the home office, where all expenses are paid, excepting petty cash disbursements. Here the main responsibility of the branch office is the custody of the goods and accounting for the proceeds in cash or credits.

5. Finally, there are combinations of any two or more of the foregoing. Consideration has not been given to factory units, which in some instances may be regarded as branch units.

Types of branch office organization. A frequent criticism of branch organizations is that they tend to kill individual personality and effort. Thus, a local organization often is more effective from a sales standpoint than is a branch of a national company. To offset this, however, line control is sometimes used, the managements feeling that to give a man rather complete and sole authority within his sphere as to policies, execution, and review offsets the "cog

in the wheel" feeling. In a nation-wide company, however, line control is not always practical. Local conditions vary widely. Often there are totally different methods of handling the details of the business. Even vital policies are often administered along different lines, even to the extent of price variations, to say nothing of general company policies such as credits and collections, merchandise returns, pay rates, hours, and vacations. A purely functional organization, on the other hand, often makes discipline difficult. Lines of authority and responsibility are not fixed, with the result that friction may develop. A line and staff organization tends to breed committee action, and this may lead to constant conferences and slowness or indecisiveness, which often are associated with committee action.

A combination of line and functional control often works well. Most companies cannot afford to maintain technically or highly trained and experienced practical men in the individual branches, or even in groups of branches. Expense is all-important. Therefore, the home office, or, perhaps, certain major district offices, may maintain an organization to which these experts belong. Thus there exists a functional organization, at least in part. To maintain discipline and to insure execution of the functional director's policies, however, there must be line chiefs.

Branch Office Operation of Liberty Mutual Insurance Company [1]

The secret of successful branch office supervision depends upon the maintenance of a proper balance between home office control and branch office freedom. Top-heavy control hampers branch efficiency and service to customers. Unrestrained local freedom results in lack of uniformity of methods and often in extravagance.

Our home office is in Boston and has a personnel of about 1,500. We have more than 100 branches located in the principal cities of the country. We also have offices in Honolulu, the Canal Zone, and Manila. Our branches vary in size from small offices having but a few employees to offices having several hundred. Our office in Rockefeller Center, in New York City, is our largest branch and has a personnel of about 600. Such great differences in size make standardization of methods difficult. Office equipment must vary in accordance with the size of the job performed. The competency and experience of supervisors must increase as assignments become more complex. As an office grows, we add more functions. This complicates our management problem and makes uniformity of practice very difficult. Because of the nature of our business, the functions of our offices vary; for example, some write

[1] Atwater, C. B., "Improving and Standardizing Branch Office Methods," *Office Management Series* No. 96, American Management Association, New York, 1941, p. 14.

bi-annual office management conference held in Boston. At these meetings we ransack from top to bottom our office management policies, methods, and problems. Arranging programs for these conferences requires several months, but we consider that the time is very profitably spent. These conferences are now an indispensable part of our effort to promote progress and uniformity.

Regional Clerical Supervisors

About a year ago we selected seven young women who had outstanding records as clerical supervisors in our branch offices and appointed them Regional Clerical Supervisors. The average length of their company employment was nine years. After a week of special training in the home office, they were assigned to assist the regional office managers.

Their duties are as follows:

1. They are sent to assist temporarily in offices in which emergencies have arisen.
2. They make regular inspections of branch offices. These inspections are quite similar to those made by the regional office managers.
3. They are expected to become specialists on branch methods. Their training and past experience enable them to deal authoritatively with all clerical procedures. Because of their close contact with methods, they help in simplifying and standardizing procedures.

We used great care in selecting these Regional Clerical Supervisors, and each has proved to be eminently successful. They are most enthusiastic about their jobs and their activities have been enormously helpful, so much so that I have had no difficulty in securing budget to add more to the group.

So that I may be in sympathy with branch office problems and know by personal contacts that the work of our department's field organization is successful, I make rather extensive trips. These visits have enabled me to acquire on-the-ground appreciation of the value of this project. On the way to the coast last spring, I visited our Houston office. This is a small branch office with four men and four clerks. Because of illnesses and a resignation due to marriage, the office suddenly found itself with but one clerk, and a rather inexperienced clerk at that. A Regional Clerical Supervisor was dispatched by plane from Chicago, quickly arrived on the scene, and when I visited the office she was busily engaged training the new clerks she had just hired. In the meantime she was keeping up the most essential work. Many other examples can be given of the value of these Regional Clerical Supervisors on emergency assignments, but I want to describe another important part of their work.

Our regional office managers have been making two inspections a year of branch offices in their territories. Several of these men have so many offices under their jurisdiction that they have found it difficult to give proper time to inspections. We consider these inspections very valuable, for through them we are able to know whether the branch is conforming to standard practices and operating efficiently and to apply remedies where needed. The addition of the Regional Clerical Supervisors has

has to do with the actual handling and storing of the products.

The controller and the general sales manager establish the policies and, after the approval of the chief executives, they see that they are carried out. The controller, while maintaining no direct authority over the branch managers, does stipulate the methods to be used in preparing customers' invoices and maintaining stock records. The general sales manager's chief concern, of course, is the volume and types of business produced by the various branches.

Each branch of this company "buys" its merchandise from the various mills, stores it for quick service, and distributes it as the customers require. Each branch is a selling office, and no attempt has been made to make an office manager out of the branch manager. Instead, there is an office manager at each location whose duty it is to see that the office work, which includes the invoicing mentioned above and the maintenance of stock records, is handled according to the directions issued by the controller through the general sales manager.

The customers of this company buy many items which cannot be carried in stock; for this reason, orders are placed on the various mills (through the general offices of the company) and shipments are made to the customers directly from the mills. Because of the complexity of the specifications appearing on such orders, order writing is one of the chief concerns of the office manager and a good portion of his time is spent in supervising this work. Each office manager is acutely conscious of the fact that sales orders incompletely or inaccurately drawn up adversely affect customers' service. For this reason, each of them is most particular that this phase of the work be done correctly.

In order to make certain that the methods used by the branches conform with the regulations issued by the controller and the general sales manager, inspections are made at regular intervals, sometimes by the traveling auditor, sometimes by a representative of the sales department, both of whom are familiar with the approved procedures governing the accounting, sales, and stock functions. In addition to this, formalized bulletins and operating manuals are issued and kept current, so that all branch and office managers may be aware of additions and changes to procedures.

Branch office methods of the Retail Credit Company. The Retail Credit Company is a corporation furnishing information on individuals for various purposes, such as insurance underwriting and claims, the extension of credit, and pre-employment check-ups.

The reports are primarily character reports covering moral hazards and other factors pertinent to the transactions under consideration. The company has been in business since 1899, covers North America, and has worked out a very definite system of branch office control. This is necessary because customers may request reports from any or all of the branch offices. The service must carry certain standards and a uniformity that stamp it as Retail Credit Company service, irrespective of whether it comes from Maine or Texas, Quebec or Hawaii.

Each branch office is responsible for results and service in its territory. These territories are drawn by state, county, or provincial lines. One office does not overlap the territory of another. There are 117 branch offices varying in size from a personnel standpoint, with an average personnel of 34 per office. The primary function of the branch offices is to render satisfactory service on the reports requested of them. Selling is done largely by specialized personnel.

Accounting. The branch offices do no bookkeeping whatever. Each day the results of the day's operations are sent in to the home office, where credit is given for the business completed and charges against customers recorded for billing purposes. All regular expenditures, such as rents, towel service, and so on, are taken care of by the home office accounting department. Practically all bills are approved by the branches and sent to the home office for payment. All salaries and fees are paid by the home office. All billing of customers and collections are handled from the home office. Central bank accounts are carried in New York and Toronto on which any manager can draw if necessary. The branch offices, therefore, do not have a revolving cash fund.

Supplies and space. All stationery and office supplies are furnished from the home office. Printing and other materials are uniform throughout the organization. Furniture is standardized and purchased either by the home office or by the branch manager under specific instructions as to the standard. Office space also has been standardized to a large extent. Experience has determined the shape of office that best suits the work and the number of square feet needed for various types of employees. By forecasting the approximate volume of business a year or two in advance, the company is able to operate with a minimum amount of space and expense.

Organization supervision. In order to keep the service uniform and standard, close control is exercised. All branch offices are grouped into ten divisions. Each division is headed by a field executive (division manager) who is responsible for getting results through the managers in his group of offices. Four of these division managers are residents at the home office; others live in their territory. Operating vice-presidents to whom division managers report are responsible directly to the president.

Standardized procedure. All clerical details are carried out in a standardized way, although actual motions need not be standardized except in a few instances. The objective is to have the results standard. For example, all files are operated in the same way in each branch office, and all notations and symbols on work in process are the same. Employees are required to do their work according to the standardized plan, even though they think some other way is better, until the standard is changed. In addition to providing standard service, this practice facilitates the transfer and relief of branch office personnel when necessary. It is possible for a new branch office manager to take over a branch office, or for personnel to be transferred to a branch office, and become effective immediately.

The number of persons in all branch offices of a certain size is standardized. It has been established just how many employees of each type are required to handle a certain volume of business. Branch managers, therefore, know in advance by reason of the estimates of business the number of employees they will need. Each job in the branch office is covered by an instruction manual. The new employee studies this manual and the office always has it as a source of reference. An educational division in the home office prepares the manuals, which are loose-leaf and are kept up to date as details or instructions are changed.

Training. The educational division in the home office operates correspondence courses covering every branch office job. It is possible, therefore, for branch office personnel to study by correspondence the jobs to which they aspire in the branch office. In addition, training schools for branch office managers and for other personnel are operated at the home office. The employees to be trained in such schools are selected by the branch office and division managers, and they may come to the home office for a period of a week or more for purpose of special training. On com-

pletion of training schools, the men go out, some as branch office managers, some as relief men, and others as specialized inspectors or special representatives of various kinds. Branch office managers are held responsible for the development of their own employees. Promotion of branch office managers is the responsibility of the division managers and the home office executives.

Morale. Harmony is maintained between the home and branch offices by extensive travel in both directions. Division managers, home office department heads, and officers visit the various branch offices frequently. Also, branch office managers are brought into the home office periodically for visits of a week or more.

16

The Office Manual

In large organizations a standardized yet simple and inexpensive method of informing employees about company policies and rules, and of giving them specific instructions regarding their own duties, is essential. This is the primary purpose of all office manuals. Innumerable large organizations, such as Westinghouse Electric and Manufacturing Company, Jordan-Marsh, Metropolitan Life Insurance Company, New York Telephone Company, Graton and Knight Manufacturing Company, Irving Trust Company, Dennison Manufacturing Company, and R. H. Macy and Company, have used manuals successfully for years. In addition, many smaller concerns engaged in a wide variety of businesses find the use of manuals well worthwhile.

A manual used in 1856. The fact that manuals have been used for years is interestingly illustrated by the following *Rules for Employees* which was brought to light during the celebration of the eightieth anniversary of the Carson, Pirie, Scott and Company store in Chicago. The rules for employees of the first store read as follows:[1]

Store must be open from 6 A.M. to 9 P.M. the year around.

Store must be swept; counters, bases, shelves and showcases dusted. Lamps trimmed, filled and chimneys cleaned; pens made; doors and windows opened; a pail of water, also a bucket of coal brought in before breakfast (if there is time to do so) and attend to customers who call.

Store must not be opened on the Sabbath unless necessary, and then only a few minutes.

The employee who is in the habit of smoking Spanish cigars, being shaved at the barber's, going to dances and other places of amusement, will surely give his employer reason to be suspicious of his integrity and honesty.

Each employee must pay not less than $5 per year to the church and must attend Sunday school regularly.

[1] Life Office Management Association Bulletin, p. 4, March 15, 1936.

Men employees are given one evening a week for courting and two if they go to prayer meeting.

After 14 hours of work in the store, the leisure time should be spent mostly in reading.

Advantages of using manuals. Several advantages accrue to organizations that make use of office manuals:

1. The manual serves as an excellent medium whereby new employees may be trained. A Chicago concern, for example, reports that it reduced the time and cost of training employees from 60 to 75 per cent by the use of manuals.

2. The use of manuals recognizes the "put-it-in-writing" principle. Reference has already been made in a previous chapter to the increasing adoption of this principle. The office manual is a specific example of why and how positive, definite information regarding company rules and policies, as well as the duties of each employee, may be put in writing.

3. When instructions are reduced to writing, in manual form, employees cannot evade the responsibility of knowing what the manual contains. The office manager who does not have manuals in use is continually faced with the new employee's statement that he did not remember what was said, or that he misunderstood the instructions given him. When verbal instructions regarding duties or rules are given at the time of employment, these two excuses never can be satisfactorily refuted. If, however, manuals are prepared and given to new employees at the time of their employment, and if new workers are told that they are expected to read the manual and will be held responsible for a knowledge of its contents, a troublesome problem can be avoided.

be most unsatisfactory. A manual setting forth present procedures clearly and specifically gives an excellent basis upon which to eliminate inconsistencies and reduce wastes resulting therefrom. Furthermore, its preparation forces the determination of the easiest, surest, and the most productive way of getting things done, the way that has been proved best by experience and study. By establishing and recording that method, the manual makes it the habitual way.

6. By telling each individual to whom and for what he is responsible, manuals define responsibilities and prevent errors. Their preparation brings to light error-breeding situations that can be corrected. The effect is to decrease misunderstandings and errors, and to move work along more smoothly and more rapidly.

7. Change and growth sometimes bring about overlapping of departmental functions, while at other times they create gaps between them. The attention necessarily given to the definition of duties and responsibilities in the preparation of manuals leads not only to a better and more accurate dovetailing of departmental responsibilities, but also to their more complete coördination.

8. If the initial preparation and later revision of a manual is made a coöperative effort, with the chief burden for its effectiveness placed where it belongs—on the man responsible for getting out the work—it becomes a powerful incentive for constructive thinking. Every business needs men who can think originally and progressively. Such men, to a certain degree at least, have to be made to order. Their discovery and development is in itself an important job that will be furthered by systematic efforts to establish correct practice.

9. Last, but by no means of least importance, it should be remembered that matters that may be entirely clear to the trained or experienced person are not necessarily so to one just entering the organization. Furthermore, fitness as an executive does not necessarily include fitness as a teacher, and, as a result, explanations of methods of doing work may not always be entirely clear. The preparation and use of a manual overcomes such difficulties.

Objections to manuals by employers. When the preparation of an office manual is proposed by the office manager or others, objections are sometimes raised by employers and employees. It will be worthwhile, therefore, to summarize the more usual objections and to comment briefly on each:

1. "Too much red tape." This is an objection often raised

against any innovation. Any change from traditional methods is frequently looked upon in this light. While not all changes are improvements, the establishment of standards is a distinct step forward. One might with equal logic, or, more correctly, with equal lack of it, urge that a change from single-entry bookkeeping to a double-entry system involved too much red tape.

2. "Costs too much." It cannot be denied that the introduction of standards usually involves some expense. However, just as in the case of the introduction of a cost accounting system, or as in the case of a move from one office location to another, the work of standardization should be regarded as an investment which, while possibly somewhat expensive in initial outlay, is one that will yield excellent returns.

ance of employees restrict individual initiative. Office manuals and written practice instructions are merely rules and suggestions governing certain activities. Viewed in the proper light, they are distinct aids by which the employee is helped to do better work. Moreover, it should be borne in mind that anyone who has constructive suggestions for improvements in methods usually has an opportunity to make them. It has been the experience of many office managers that those who urge the point about restriction of initiative most vigorously are the same ones who have the least to contribute in the way of constructive suggestions for improvement.

2. "More efficiency methods." This is frequently the cry of those who are content to "get by" with doing as little work as possible, and who see, in the introduction of standards, a device whereby they will be forced to measure up or else be marked for dismissal. Those who are unwilling to coöperate should be eliminated.

Kinds of manuals. There are four principal kinds or types of manuals in use in business organizations:

The general information manual. Such a manual usually contains information regarding the history and growth of the company, the kinds of goods or services that it sells, promotional policies, and other material of a general, informational character.

The office rule book. The office rule book is often combined with the general information manual just mentioned. Office rule books are widely used. Such subjects as the time and method of paying employees, holidays observed by the company, rules regarding lateness and absence, lunch hours, and other company regulations with which the new employee should be acquainted, are clearly and specifically set forth. Often such rule books also contain more or less detailed information regarding the personnel and welfare activities that are carried on in the interest of the employees. If, for example, a coöperative store is maintained, or if a company lunch room is operated, the rules governing the use of these facilities by the employee will be given.

Departmental standard practice instructions. Such manuals contain concrete and specific information regarding the work of the department in question, the relation of the department to other departments, the way in which the work of the department is carried on, and other information of a similar nature. The outstanding characteristic of such manuals is specificality.

Individual instruction sheets. In large concerns, where a high

degree of specialization of work by individual employees is possible, departmental standard practice instructions sometimes are further broken down into desk sheets or instruction sheets for each individual employee or small group of employees. Thus there may be a departmental standard practice instruction manual covering the work of the mailing and messenger department as a whole. In addition, however, individual instruction sheets may be prepared for each employee, showing exactly what his duties are throughout the day, and coördinated with a definite time schedule.

Office manuals at the Owens-Illinois Glass Company.[2] This company uses three separate office manuals to bring to its employees the information needed on the job. "YOU . . . And Owens-Illinois" is the title of the induction manual which is presented to each new employee.

How to prepare a manual. Many different methods are used in preparing manuals for office employees. A method very frequently followed when starting the preparation of a manual is to gather together copies of booklets or individual memoranda, which have previously been issued, containing instructions to particular departments or employees. These may indicate a starting point, at least, for an outline of present practice. The next step is to study in detail the work of each department as it is now being conducted and to outline the present practices in writing. Following this, changes should be considered carefully and, if they are approved, incorporated in the new manual of instructions. After the work of a single department has been studied and written up in this way, the preliminary draft is submitted to the department head for consideration, possible changes, and final approval. The revised draft is then prepared in its final form. Before it is distributed an adequate index should be prepared, so as to make the manual most conveniently usable.

In an office of moderate size it may be most economical to have only one copy of the manual for each department and to have this kept by the department head or his assistant for use by the subordinates if the need arises. Physical factors also must be considered in preparing the manual. If only a few copies are needed, typed sheets may suffice. If a larger number is required, they may be duplicated or printed. In any case, experience shows that, with the exception of the history and policy manual, and possibly the office rule book, the best results will be secured by preparing the manual in loose-leaf form so that changes may be made easily by substituting one page for another.

Office manual plan of Hardware Mutuals.[3] The evolution of the office manuals of this company illustrates one approach to the problem of manual preparation.

Pocket size manual. The first edition was a pocket size manual. In it we confined ourselves to a history of our companies, office hours, vacation allowances, sick leave allowances, how to prepare telegrams, how to get service from the Filing Division, and the usual general material found in office manuals. We were interested in having the people in offices outside of Stevens Point follow as closely as possible the customs and practices of the Home Office. We felt that only through the printed word would we be certain that our people had a definite record of what the Home Office wanted them to have.

[3] Willett, K. B., "Recording Simplified Procedures," *Annual Proceedings*, National Office Management Association, 1944, p. 55.

As we continued to grow, and opened more and more offices, and added new lines of insurance, we found it desirable not only to expand our office manual but also to furnish our people with written instructions covering the procedures on specific jobs and specific lines of insurance.

8½ × 11 manuals. Although we have come a long way from our original pocket size manual, we have maintained a number of the original features. The loose leaf system started in 1926 is still in vogue. The general layout is much the same. We have approximately 57 general manuals prepared by the Home Office for the guidance of our field offices. We have about 25 manuals and handbooks covering Home Office jobs. We have another 25 local manuals pertaining to local situations in our field offices. In addition we have what is known as the Master Index to our manuals.

Master Index. This Master Index is an important feature in our system. Through such a device it is easy to locate the manual in which a particular problem is covered. Suppose, for example, a question arises concerning the rates of dividends on different types of casualty insurance coverages which we have paid to our policyholders each year since organization. A new employee can easily and quickly locate the individual manual carrying this subject. All he needs to do is to refer to the Master Index to find the name of the manual in which the subject is covered. Then, by referring to the specific manual, the subject will be found. Each individual manual has its own index.

Editing of manuals. The majority of our manuals are either written or edited by our Standard Practice Division, which is under the supervision of a Standard Practice Manager, who reports to the Vice-President in charge of Office Management.

Manuals prepared by the Standard Practice Division cover the work of our various service units, such as Filing, Stenographic, Calculating, Duplicating, and Policywriting.

Manuals written outside of the Standard Practice Division and edited in the Standard Practice Division deal with Underwriting, instructions to salesmen, adjustment of claims, and others.

Local manuals. We also have local manuals prepared in the field offices. We find our local manuals a very important adjunct to our regular manual system. We know that each part of the country has its own problems, and that no one in our Home Office in Stevens Point could satisfactorily describe all local conditions.

We place the responsibility for recording the standard, or proper way of handling local problems, in the hands of our field offices. The Home Office merely receives a copy of each of the local manuals in use.

Distribution of manuals. Control of the distribution of manuals rests in the Home Office, where master records are kept. These records show the number—quantity—of any manual turned over to a field office. Individual employee records are kept in the field offices. The latter are kept to facilitate the distribution of revisions. Also, these employee records are maintained so that, at the time an employee is transferred or

leaves our companies, we know the manuals charged to him and can secure them before he actually leaves.

The distribution of new manuals and manual revisions plan is to have one individual in each office responsible for keeping the manuals in that office up to date. We have found by experience that we cannot hand correction pages for a manual to employees and expect them to keep their own manuals up to date. Too often they will put off placing the new material in the proper place. With someone responsible for this work, we are in a better position to guarantee that our manuals are kept up to date.

Whenever we place correction pages in a manual held by an employee, we give him a notice of the pages corrected, and leave with him the old pages for destruction. A sample notice is shown as Figure 42.

SAMPLE NOTICE OF CHANGE IN MANUAL

Hardware Mutuals

To Holders of Office Manuals
From H. O. Standard Practice Division Date
Please read and destroy

Subject Office Manual Correction—Western Canadian Dept.

Revised pages 2.05, 2.09, and 2.13-2.14 (have been) (should be) inserted in your copy of this manual in place of the corresponding old pages which should be destroyed.

This revision is being made in line with Bulletin 60—843, Western Canadian Dept.—Winnipeg, Manitoba.

IEZ32

Fig. 42.—Manual Change Notice.

It should be kept in mind that in our companies there are relatively few complete manual sets in use. We have one complete set in each of our large offices for general use within the office. But the individual employee has only those manuals which directly affect his job. A secretary would have a Stenographic Manual, and a policywriting supervisor a policywriting manual.

Preparing new manuals. The Stenographer's Manual will illustrate how we draw up the first edition of a manual. What we did was no different from the practice usually followed by other companies. Someone in our Standard Practice Division made an outline of all the items we wanted to pass on to our stenographers as guides, or standards, in the handling of stenographic work. The original list included a description of how to set up a letter on one of our letterheads, the various salutations, the standard complimentary close, and other routine stenographic requirements. From this outline we wrote the various chapters for the Stenographer's Manual and released it to those affected.

After these stenographic instructions had been in use for a while, questions or problems came up which were not answered in the original draft. As a result of these questions, decisions had to be made, and we secured additional material for future editions or revisions of the Stenographer's Manual. This practice has been followed in the preparation of other manuals.

Manual layout. We follow a standard plan in the layout of manuals. Each has a title page, authorized distribution page, foreword, table of contents, index, text and exhibits. Each manual is broken down into chapters, and each chapter carries its own breakdown of page numbers. We can expand the number of chapters in a particular manual as revisions are required. We can add and take away pages from one chapter without affecting the page numbering of other chapters.

Like many other companies, we use the Dewey Decimal System. Each page in Chapter I starts with Digit No. 1, the first page of Chapter I being 1.01, the second page, 1.02. In Chapter II the first page carries 2.01 and the second page 2.02. If, at any time, a correction or addition is necessary between pages 2.01 and 2.02, we merely insert a page carrying 2.011.

Our manuals are mimeographed, dittoed, or printed, depending on the quantities required and whether they are to be used outside or inside the office. Salesmen's Manuals are printed; Underwriting Manuals are mimeographed. Both sides of all manual pages are used.

Revision schedule. We have a regular schedule of manual revisions. Frequency of revision depends on the type of manual. Some must be revised weekly, some quarterly, some semi-annually, and some annually. The Standard Practice Division is responsible for keeping a record of the revision dates and for seeing that the revisions are made according to schedule.

Revision material. To accumulate material for the revision of our recorded practices, our Standard Practice Division has a folder on each manual. In these folders material is kept to be included in a manual at its next revision. In every instance the material will cover items on which decisions have been made.

Historical records. When manuals are revised, all the old pages are destroyed, except those held by our Home Office Library. In the Library we keep one copy of all obsolete pages as a permanent historical record. We intend to place this historical record on microfilm to conserve filing space.

SAMPLE PAGE OF A HARDWARE MUTUALS MANUAL

CALCULATING MANUAL 1.01

I. Introduction

A. FUNCTION OF CALCULATING DEPT.

The Calculating Dept of a No 1 Office, as an important and integral service unit, handles work for nearly every other department in the No 1 Office. Although the most important duty of the No 1 Calculating Dept consists of calculating premiums on the insurance policies issued by our Company, various material for other No 1 departments is also handled

By having a centralized Calculating Dept, the necessity for the maintenance of calculating machines (Comptometers) in other No 1 departments is eliminated and the definite responsibility for calculating is assigned to one place

B. RESPONSIBILITY OF CALCULATING DEPT.

The No 1 Calculator is responsible only for calculating the rates figures, and percentages shown on various forms that come to her for calculating work from other No 1 departments In no event should the No 1 Calculator be made responsible for anything except the actual necessary calculations

In brief, other departments served by the Calculator are responsible for indicating on the various working papers sent to the Calculator the proper premium formulae or other computations to be performed The No 1 Calculator then is responsible for the accurate calculation The Calculator is not held accountable if the computations indicated by some other department are incorrect Of course, the No 1 Calculators should not perform calculations indicated which they know are improper, but should return such items to the department from which they were received

On contacts with the Und Dept, any questions are taken up with the individual involved The No 1 Und Manager is the final authority on interpretation of Manual rules and their application

The Calculator may be called upon by other departments to figure miscellaneous items in addition to those covered in this manual Specific instructions should be given in each instance so that the Calculator clearly understands how she is to handle these miscellaneous items

C IMPORTANCE OF ACCURATE CALCULATING

In no other department in the No 1 Office is the need of accuracy any more important than in the No 1 Calculating Dept Generally speaking, one of the major duties of the No 1 Calculator is the calculating of the dollars and cents involved in the various transactions between the Company and our policyholders That is, practically all premiums, return premiums, corrections dividends, etc, are calculated Any errors in these figures are likely to result in financial loss to the Company or to the policyholder Also, an error in the No 1 Calculating Dept resulting in a premium overcharge or undercharge on a policy might antagonize the policyholder and cause us to lose his goodwill

D ORGANIZATION OF CALCULATING DEPT.

The No 1 Calculating Supervisor is in charge of the No 1 Calculating Dept and does actual calculating work The No 1 Calculating Supervisor is responsible for the allocation of duties, training and the coordination of all clerks in the department The No 1 Calculating Supervisor reports to the No 1 Office Manager

The number of persons comprising a No 1 Calculating Dept varies depending upon the premium volume written by a No 1 Office and the amount of calculating work necessary

When a No 1 Calculating Dept has more than one girl, one is known as Calculating Supervisor, and the other as Calculator The work is divided by type, rather than by territory, the Calculating Supervisor handles corrections, cancellations, payroll audits, etc, and the second *Calculator handles new business and renewals*

E CANCELLATION MANUAL

Please refer to the Cancellation Manual for cancellation and reinstatement procedure instructions

Fig 43.—Sample Manual Page.[4]

Exhibits. Another important part of our manuals is the exhibit section. We show our people by actual example how we want forms completed or procedures carried out. Actual forms or facsimiles are used as exhibits. In many cases our exhibits are prepared by printing regular copies of a form on pages to fit the manual in which the form is described. When running off a form which is to be described in a manual, we have sufficient copies made on 8½ × 11 paper for use as exhibits.

[4] *Ibid.*

Improper use of manuals. Manuals are of little value if improperly used. We find it necessary to keep reminding our people that manuals, like budgets, are a means to an end, or a guide in the operation of our business. Occasionally we find people who prefer to take a procedure outlined in a manual and use it in spite of the results obtained rather than to exercise judgment in carrying out the work at hand. A destructive flood along the Mississippi might make it desirable to handle premium collections in that territory at variance with the usual practice described in a manual. We try to put the responsibility for decisions as near as possible to the point of action.

Proper use of manuals. We have found that, when properly used, recorded procedures help in solving problems in field offices, as well as in the Home Office. It is not necessary to correspond and discuss the same subjects year after year or as positions are filled with different people. Instructions based on previous decisions can be found in the manual.

Use of illustrations in manuals. The written word is not the sole means available for establishing standards of correct practice. Diagrams showing the interrelations of departments, forms, personnel, the flow of work, correct routings, and the like, such as are shown in Figure 44, are often used. Such diagrams are excellent media for explaining the relations of parts to the whole. They go far toward providing the perspective required for sound judgments,

MAN AND MACHINE CHART

TYPE MACHINE Calculator CHART NO.

PART NAME OR NO. DEPT. NO.

OPERATION Computing Cost of S-10 Report Item DATE

OPERATORS NAME J. S. Spratt CHARTED BY

SYMBOL	MAN	TIME	SYMBOL	MACHINE	TIME
	Get book from P.O. group	5		Idle	5
	Prepare book for work	2		Idle	2
	Locate item	1		Idle	1
	Make calculation	1		Calculating	1
	Enters calculation on report sheet	½		Idle	½
	Make calculation	1		Calculating	1
	Enters calculation on report sheet	½		Idle	½

Fig. 44.—The Man and Machine Chart shows the analyst how long machine is idle.[5]

and they are easily and quickly understood. In some companies large diagrams are made for posting on bulletin boards or other

[5] Illustration from Kelly, N. J., "Simplifying Work Methods," *The Office*, March, 1916, p. 43.

strategic places; other firms do the same and in addition furnish miniatures to all individuals, with their written instructions.

Modern office manuals also make use of all kinds of illustrations. Photographs, line drawings, cartoons, charts, graphs, pictographs, and tables all can be used to good advantage, and the wider the variety, the better. Such illustrations create interest and reduce the amount of text the employee must read.

Content of a typical general information manual. Since the primary purpose of such a manual is to give specific information regarding company policies, rules, and regulations, the detailed content of the manual of one concern naturally will be somewhat different from that issued by another organization. The purpose of the following paragraphs, therefore, is merely to indicate in outline form the kind of data usually included in a general office manual.

Introduction. A typical foreword is this:

This manual is issued to familiarize you with the rules and regulations of the company and to give you a clear insight into the policies of the company in all its relations with you.

Should there be anything in connection with your work or the company's policies that you do not clearly understand, do not hesitate to ask your department head; he will be very glad to see that you receive the desired information.

You are expected to read this manual carefully and to preserve it for reference when occasion demands.

Employment. The official responsible for hiring, transferring, dismissing; rules regarding resignations or notice; recommending friends for jobs.

Attendance. Daily hours; holidays; absence, with or without leave, how paid for or penalized; lateness and promptness, how penalized or rewarded; overtime rules; vacations.

Promotion. Methods of salary increases, advancement, transfers; prizes or other reward methods for stimulating suggestions.

Correspondence. Rules regarding the distribution and collection of mail.

Factory. Details regarding the product, its manufacture, selling points, method of shipment, and so on.

Customers. Rules regarding acknowledgment of orders, handling complaints, samples of form letters illustrating relations between house and customer.

Business etiquette. Rules and suggestions regarding deportment, dress, talking, receiving visitors, telephone calls, smoking, personal mail, debts, neatness about desk and person, what is confidential about jobs, gifts, and so on.

Facilities and equipment. Hours and rules regarding use of lunch

room, rest room, library, and lockers. First aid and safety equipment available. Location of various departments. Use of machines. How to requisition supplies.

Education and welfare. Whatever is available in the way of schools or courses on the premises or in the neighborhood that may interest the employee. Prize and bonus plans; profit-sharing or pension system, clubs, and so forth.

A mailing-department manual. The following abstract from the office manual of the Graton and Knight Manufacturing Company, dealing with the work of the mailing department, illustrates a departmental procedure manual.

Mail room. A delivery of the greater part of the incoming mail is made to the department heads at 8:00 A.M., the balance of the first morning mail being delivered at 8:30. Other deliveries are made at 1:30 P.M. and at 3:00 P.M.

Collections of outgoing mail are made as follows: 10:30 A.M.; 1:30 P.M.; 3:00 P.M.; 4:30 P.M. No collections will be made after 4:30 except by a special request to the mail room by the person who desires to get mail in after this time. The morning and noon collections are made to enable the mail to catch certain through trains to distant points. Any mail for which especially rapid delivery is desired should be in the mail baskets well before collection time.

Interdepartmental mail is collected hourly on the following schedule: A.M.—7:45, 8:45, 9:45, 10:45; P.M.—12:45, 1:45, 2:45, 3:45. All interdepartmental mail should be delivered within a half-hour after the time of collection. Employees are requested to use this mail service for communications whenever possible, in order to save time, and also to prevent confusion throughout the office, which is a necessary result of much personal running of errands.

Where quick delivery of some paper is necessary at times other than those of the regular mail collections, office boys are available upon request to the mail-room head. It is desired, however, that the use of the office boys be kept at a minimum, and that they be called upon only for errands of an emergency nature.

Owing to the fact that our receiving departments are instructed to open all incoming parcel-post and other packages for purposes of recording receipts, it is suggested that all personal mail, etc., should be directed to home address to avoid confusion and possible embarrassment.

A departmental manual. The following abstract from the office manual of one company illustrates a departmental procedure manual:

P-Per 4
3-15-47

ACCIDENTS AND INJURIES TO EMPLOYEES

Personnel Department Procedure

The General Procedure, P-Per 3, for the handling of all cases of illness, accident and injury to employees explains the duties of supervisors and First-Aid Kit Custodians with respect to the treatment and reporting of all such cases.

The duties of the Office Service Manager are as follows:

1. Upon receiving a report of an accident or an injury, investigate the case to determine if the attention of a physician is required.
2. If such is the case, have the employee escorted to the doctor's office or, if inadvisable to move the employee, have the doctor visit the office. When the treatment is completed, provide for the necessary escort to the employee's home from the Doctor's office or from the Company offices.
3. If the employee has no preference for a particular physician, refer him to:
   3.1 For eye injuries:
   Dr. . . . . .
   Address
   Tel. No.
   (Phone for appointment before sending patient)
   or
   Dr. . . . . .
   Address
   Tel. No.
   3.2 For all other injuries:
   Dr. . . . . .
   Address
   Tel. No.
4. Immediately after the occurrence of an accident which requires the services of a physician, the Office Service Manager shall notify the Compensation Claim Department immediately of the incident, by mail if the injury was not serious, by telephone if the injury was serious.
5. Mr. . . . . will consult with the Office Service Manager and fill out "Employee's First Report of Injury" in duplicate: (Form C-411).
   5.1 The original goes to Mr. . . . . who will file all necessary reports.
   5.2 The duplicate should be filed in the employee's Personnel File.

In the absence of the Office Service Manager, his function in the above procedure will be performed by the Personnel Department.

A manual for stenographers and secretaries. The following excerpts from the *Stenographers' Guide* of The Fuller Brush Company are indicative of the type of instructions which will aid in the standardization of correspondence forms and practices.[c]

Foreword. Over a period of many years we have noted the perplexing questions which arise during the stenographer's day. We have tried to cover these points as far as possible. . . . Although the subject matter and the tone of the letter are the responsibility of the dictator, the general arrangement and appearance of the correspondence rests with the stenographer. Thus, it is only by the cooperation of every secretary, stenographer and typist that we may hope to maintain the standards set for Fuller Brush Company letters. . . . The Company will welcome suggestions for the improvement of the next revised edition.

To the stenographer: Your skill in stenography and typing is the key that opens the doors of business to you. Once you are employed, your advancement depends upon many things. . . . First, you must have, or acquire, a personality that inspires confidence. Cheerfulness, tact and the ability to work harmoniously with other people, play an important part in the development of personality. Remember that cooperation is a "must" in successful business relationships. . . . A secretary should be able to meet all classes of people courteously and graciously. Knowledge of correct English is essential. To be confident that you do not make grammatical errors or mispronounce words, will give you poise and assurance.

The mechanics of letter writing. First impressions count. The general appearance of a letter influence the mental attitude of the reader. Fuller correspondence should be distinctive in appearance but should have no oddities of arrangement, for attention is distracted by an unusual set-up. . . . Any letter which is poorly arranged or which has errors in spelling or composition, casts a direct reflection on The Fuller Brush Company. . . . Stenographers should take pride in producing perfect letters, and so do their part in creating a favorable impression for their firm.

Inter-organization correspondence. Letters to our District Supervisors, Branch Managers and Field Managers should be written on Inter-Organization letterheads. No envelopes are required for branch mail.

Inclosing self-addressed stamped envelope. When writing a letter requesting a favor, it is courteous to inclose a self-addressed stamped envelope for reply. Please do this without being specifically directed in each case.

Carbon copies. Stationery is inter-leaved with carbon and distributed in the General Service Department. A light-weight white paper is used for extra copies. . . . The file copy is always made on yellow paper. Whenever a yellow sheet appears, we know it belongs in the files.

Rules for carbon copies. When writing to employees of the Company,

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[c] Paul, E. A., *Stenographers' Guide,* The Fuller Brush Company, 1941.

provide an extra copy for the person higher up; that is, where the letter is to:

1. A Field Manager, make a copy for his Branch Manager and District Supervisor.
2. A Branch Manager, make a copy for the District Supervisor.

The Branch Manager should have a copy of all mail going into his territory. For instance, in answering an inquiry from Portland, Maine, we should send a copy to the Branch Manager of our Portland office.

Form of letter. It is our custom to write all letters in block form, single space, with double spacing between paragraphs. The right and left margins should be of equal width and the right margin as nearly straight as possible. If a letter is short, it may be centered by leaving wider margins, but the length of the typewritten line should never be less than five inches. A very short line gives the page an unbalanced appearance. . . . If a letter is double-spaced, the paragraphs should be indented.

Among the other subjects discussed in the sixty-four page manual of this company are:

Illustrations of accepted letter forms.
A list of words frequently confused (e.g., accept, except; affect, effect; already, all ready; etc.).
A list of words which are separated when written (e.g., all right, any day, any time, etc.).
A list of accepted abbreviations.
Rules for word division at the end of a line.
Words frequently misspelled.
Words frequently mispronounced.
Rules of capitalization.
Proper uses of punctuation marks.
The use of figures.
Telegraph, Cable and Radio Services.
Duplicating processes and the preparation of stencils and masters.
Terms used in the Company's business.
The Company calendar.
Stenographic and typing standards.
Directory of Executives, Department Heads and Correspondents.

Instructions for individual employees. The value and use of a manual is not limited to its original purpose of helping to establish correct practice. The analysis it makes of a job, and the detailed written description that it provides, enables the employment department to tell applicants exactly what they will be required to do. At the same time, manuals serve as a basis for specifying the personal and physical qualifications required to fill

a position successfully. Here is a characteristic page of instructions from the office manual of the Energy Control Company: [7]

Procedure to be followed in checking an order—continued: Invoice number to start at No. 1 and run consecutively. Cash received for such material would be placed in the Petty Cash Account of the Philadelphia Office and a record kept of such payments. Should a check be received for such materials the check would immediately be forwarded to New York for deposit. In placing this record in the Petty Cash Account, please be sure that the amount of cash received, the order number and invoice number, the customer's name, and the equipment are clearly noted on your petty cash record.

Upon notification of shipment by the factory of instruments, such as CO_2 Recorders, Flow Meters, or Combustion Control equipment, a service request form should immediately be made out which is to be turned over to the Service Department for a preliminary visit to the customer's plant to give whatever assistance possible in laying out the installation of the equipment. A report on such a visit should be made by the Service Department and this information should be placed in the permanent data file. If the Service Engineer wishes to follow-up his first visit with a second at a later date, he should notify the clerk in the office so that the report may be placed in the follow-up file to be referred back to him on the date specified.

Filing system. In the general office will be kept all correspondence of the current year and for one year previous. Correspondence, orders shipped, quotations, etc., prior to that period, will be kept in the file cases in the stock room for reference as required.

All correspondence will be filed alphabetically according to the subject of the correspondence (this to be the name of the particular job under discussion) except as noted in the following tabulation:

The division of files will be as follows:

1. General files.

The general files will be for all correspondence, quotations, specifications, and blue prints for every job. A folder will be made for each piece of correspondence under the name of the job and all correspondence for this particular job will be filed in its respective folder according to date, the current correspondence always placed on the top. The general files will be alphabetical regardless of territory, the name and address of the plant being typewritten on the label on the folder. As a rule all correspondence pertaining to one particular job may be filed in one folder. However, there are occasions such as might develop on large jobs where combustion control and complete layouts are being supplied, where the volume of correspondence is too large; in order to facilitate the handling of such jobs and the attaining of information quickly, these jobs will have the following divisions.

[7] "Planning and Preparing Office Manuals," *Dartnell Report* No. 528, Dartnell Corp., Chicago, 1915, p. 31.

An accounting department manual. Manuals are widely used by accounting departments, particularly by large organizations with many branch offices. The following extracts from the General Plant Accounting Instructions of Swift & Company in connection with the Federal Social Security Act are an excellent illustration of the practical utility of such manuals.[s]

Departments concerned:

Manager	Bookkeeping	P. A. Instr. #24
Auditor	Employment	(Supersedes all previous P. A. Instr. #23 and #24)
Superintendent	Timekeeping	
Departmental	Soc. Sec. Committee	

SOCIAL SECURITY TAXES

General administration. Accounting instructions pertaining to the Social Security laws are issued by the Plant Auditing Dept. Procedure in connection with employes' benefits is covered by the Social Security Benefit Manual. Questions regarding payment of taxes, contacts with governmental boards or their representatives, or interpretations of the law shall be addressed to the Social Security Division, Chicago.

Registration of employer. All employers were required to register each of their places of business on Form SS-4 during November, 1936. Each corporation is considered a separate employer. The Federal government has assigned one registration number to each corporation. Swift & Company (Illinois) corporation registration number is 36–1848190.

Registration of employes. Form SS-5 shall be used for registration of all employes. The Social Security Board will supply a numbered social security account card to each employe. Please impress upon employes the necessity of preserving these cards permanently.

PAY ROLLS AND OTHER RECORDS

a. Pay rolls and employes' records shall be retained in accordance with P. A. Instru. #170, Preservation of Records.
b. Employes shall be grouped on pay roll in accordance with the state to which pay roll taxes are payable.
c. The Bureau of Internal Revenue will compare the pay roll figures reported in the Federal unemployment insurance tax return with the pay roll reported in the income tax return; the two figures must agree, after making allowance for the following:
   (1) Salaries or wages paid for services outside the United States.
   (2) Labor charged to construction jobs—not included as labor, on income tax return.

Accounts to be carried. To record taxes accrued and charged to opera-

[s] Adapted from *Report on Controllers Manuals of Instructions,* Controllers Institute of America, New York, 1941.

tions and taxes collected from employes, the following accounts shall be carried:

Account	Ledger Section	
Federal Unemployment Insurance Tax Accrual State Unemployment Tax Insurance Accruals Federal Pension Tax Accrual	23	On trial balance: Separately. On balance sheet: Combined in item of Social Security Tax Accrual
Federal Unemployment Insurance Tax Expense State Unemployment Insurance Tax Expense Federal Pension Tax Expense	Memo Expense	*On income statement, C-932:* Separately. On departmental: Include in Social Service & Casualty.
Employes' State Unemployment Insurance Contributions Employes' Federal Pension Contributions	22	On trial balance: Separately. On balance sheet: Combined with Sundry Creditors.

Transferring Federal and State tax accruals and contributions. After the close of each calendar quarter, accrual and contribution accounts shall be treated as follows:

a. Swift & Company (Illinois) units shall credit the balances of their Federal and State Unemployment Insurance and Federal Pension Accrual and Contribution Accounts to Chicago through Account Current, in the month following close of quarter, after making sure that accrual and contribution accounts reflect correct tax liability. When transfer is made, the two unemployment insurance tax accruals shall be combined into one figure and so listed on Form C-2699. The credit to Chicago Account Current shall be in one total for all accrual and contribution accounts combined.

b. Home offices of subsidiary corporations shall carry Federal and State Unemployment Insurance and Federal Pension Accrual and Contribution accounts on their own books.

Social Security Tax Report, Form C-2699. All Federal and State Social Security tax returns are based upon pay roll reports on Form C-2699. This form is self-explanatory and will be made up as per instructions printed thereon or furnished by the Social Security Division. It shall be mailed to the home office of the corporation monthly or quarterly, as directed by the Social Security Division, Chicago, so as to reach the home office by the 15th of the month following close of taxable period.

Federal and State Forms

a. Each quarter, complete Federal Form SS-1b for all employes in triplicate, including temporary employes and those who have left

the service. Attach the original and duplicate to Form C-2699 and mail under private cover in accordance with instructions from Social Security Division. Retain triplicate in local file. (Chicago carries a stock of Form SS-1b under form numbers P. O. 1108 for Swift & Company (Illinois) and P. O. 1137 for subsidiaries.)

b. State information returns are required quarterly by most states, such reports being similar to those of the Federal government. Procedures for filing state reports vary with the states. Forms required by home offices shall be attached to quarterly C-2699. State forms should be obtained locally by each unit. For further details see instructions from Social Security Division.

17

The Preparation and Use of Forms

The importance attached to the preparation of forms has been admirably stated as follows: "That engineer is considered the best designer who develops a machine that produces the best results when used. Should not the designer of forms in an office be judged the same way, that is, by the results obtained when the forms are in use?"

Unfortunately there is a tendency, when a change of system is contemplated, to say, "We can draw up some forms that will take care of this." Forms play too important a part in clerical work for their preparation to be dismissed so quickly. When one considers that the largest part of clerical work consists of entering information on forms and transferring information from one form to another, it is apparent that the preparation, control, and use of forms are indeed important matters.

Advantages of giving proper attention to forms. Form preparation and control merit the careful consideration and attention of the office manager for two primary reasons: (1) It has been definitely shown in innumerable cases that money can be saved and wastes reduced when careful attention is given to the work of preparing and using forms. (2) Where such attention is given to forms and their use in business operations, greater standardization and efficiency are secured.

In the matter of money savings, reductions of 20 per cent or more, merely in the cost of the forms themselves, are by no means uncommon. Printing costs alone, including composition, press work, and paper stock, quickly mount up if the preparation of forms is not given careful consideration. An insurance company, for example, reports that a study of the costs of printing forms revealed one instance in which the printer was using a very expensive stock for a temporary form that was used once and then thrown away. Upon investigation it was found that a stock costing only one-third

as much would suffice. A survey of the proper grades of paper to be used for all forms in the organization revealed that about 75 per cent of them could be printed on a good grade of sulphite bond. This careful selection of paper meant a saving of $4,000 in one year on one class of work alone.

While the benefits derived from standardization of procedure and higher clerical production per employee cannot always be measured as readily as can money savings, they are nevertheless of real practical importance. The proper arrangement of the data to be entered on a form is an important and essential step toward more efficient clerical production. In a subsequent section of this chapter a number of additional specific illustrations are given of direct and indirect savings and benefits that have accrued to nationally known companies as the result of the attention that has been given to form preparation, design, and control.

Procedure for establishing form control. When an office manager realizes the extent of the waste resulting from poorly designed forms and the advantages to be gained through the adoption of certain standards, he will naturally wish to secure these advantages for his organization. Although in some cases this is done by a forms committee, it is preferable to assign the authority and responsibility for such a program to the person most interested in forms, presumably the office manager. The procedure of the forms control plan and the place of the office manager in that plan should be explained to the officers and operating department heads, so that they will be more inclined to give him the coöperation which is essential to the success of work of this kind.

The first step in making a study of forms is to bring together all the present forms. This simple step usually emphasizes the necessity for the work about to be undertaken; for in almost every organization of any size it brings to light scores of forms that are obviously superfluous or obsolete.

When the forms are gathered, care must be taken to include all the forms. Every printed (or otherwise processed) piece of paper should be included. Letterheads, envelopes, memoranda, and accounting-department forms should not be overlooked. The stock room must not be overlooked. Nearly always a number of forms will be found that are not in active use but still clutter up the shelves. They survive because there is no official executioner. At the best they merely accumulate dirt and take up valuable space. Because they may inadvertently get into circulation, they should

be destroyed, and official notice should be given of their demise. After all forms have been secured they should be listed and analyzed. Figure 45 illustrates a convenient method of summarizing the important points regarding each form.

performance of clerical work easier than it would be if a blank sheet of paper were used. Consequently, the kind of information to be entered on the form, how it shall appear on the form, and other similar matters must receive first consideration.

Size of Form (in Inches)	Cuts Without Waste from Standard Sheet Measuring	Number Obtained from Single Standard-Size Sheet	Number of Single Forms Obtained from One Ream (500 Sheets) of Paper
2¾ × 4¼	17 × 22	32	16M
2¾ × 8½	17 × 22	16	8M
3½ × 4¼	17 × 28	32	16M
3½ × 8½	17 × 28	16	8M
3½ × 17	17 × 28	8	4M
4¼ × 5½	17 × 22	16	8M
4¼ × 7	17 × 28	16	8M
4¼ × 11	17 × 22	8	4M
4¼ × 14	17 × 28	8	4M
4¼ × 28	17 × 28	4	2M
5½ × 8½	17 × 22	8	4M
5½ × 17	17 × 22	4	2M
7 × 8½	17 × 28	8	4M
7 × 17	17 × 28	4	2M
8½ × 11	17 × 22	4	1M
8½ × 14	17 × 28	4	
8½ × 22	17 × 22	2	1M
8½ × 28	17 × 28	2	
11 × 17	17 × 22	2	1M 2M
14 × 17	17 × 28	2	2M 1M

Bond and ledger papers are usually promptly obtainable in 17 × 22, 17 × 28, 19 × 24, 22 × 34, 28 × 34, 24 × 38.

Use. The use to be made of the form includes a consideration of such things as how the information to be entered on the form will be received by the person preparing the form; whether the form is to be filled in in pencil, in ink, or on a machine; how long the form is to be kept; the relation of the form in question to other forms.

Standard form sizes. The form sizes listed below meet practically any need. Each can be cut, without waste, from standard sizes used by all printers.

Weight and color. The weight and color of paper to be used for forms involves four main factors:

1. Longevity. The length of time which the paper must resist deterioration.

2. Treatment. The amount and severity of handling, folding, or exposure to which the paper will be subjected.

3. Impress. The hand or mechanical method of applying the written matter, illustrations, decorations or rulings, and so forth.

4. Appearance. The character, or sense appeal, in the paper itself.

In general, it is advisable to standardize all forms on as small a variety of grades, weights, and colors of paper as is practical. As inexpensive a grade of paper as will give satisfactory service should be used. Because of possible confusion, and because of the expense, it is well to avoid elaborate color schemes. It is recommended that, if there are more than three copies of a form, they be distinguished by number rather than by color.

Lines printed or ruled. It is usually cheaper to print lines than to rule them, especially in large quantities, since the forms must be run through the press to print the type and the lines can be printed at the same time. If lines are ruled, the forms must be run through the ruling machines in one or more directions and in one or more colors after the type is printed. Practically all the effects gained by lines ruled in colors can be secured by the use of heavier or lighter printed lines, or by double lines. A further disadvantage of ruled forms is that corrections cannot be made easily after the form has been set up. Printers often refuse to show proof of forms containing horizontal and vertical rules, as correction of such forms might necessitate resetting the ruling pens throughout the entire form.

back should be "tumbled"; that is, the back should be printed so that when the bottom is turned up, the back of the card will be right side up.

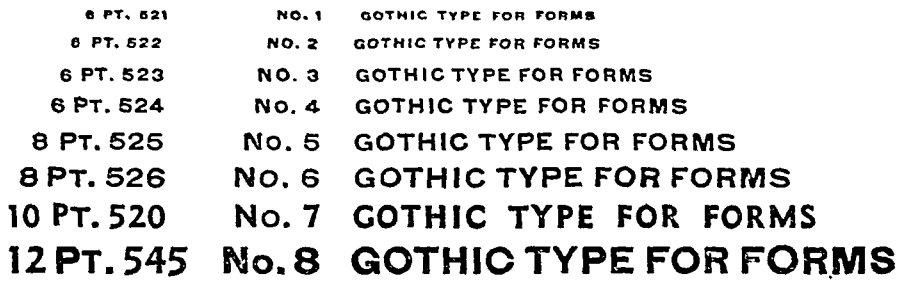

Fig. 46.—Sizes of Gothic Type.

Punched, scored, or perforated. The printer should be instructed as to the size of holes and distances from centers.

Quantity wanted. When a form is printed for the first time, or when an important change is made in an old form, it is not desirable to print more than a relatively small supply, so that, if the need for changes becomes apparent later, it will not be necessary to wait very long for these changes to be made. When the form has proved itself satisfactory, it is desirable to order a larger quantity—enough for six or eight months, but not more. Savings made through printing large quantities are often nullified by having to destroy out-of-date forms.

Principles of good form design. The following suggestions will be found helpful as a guide in designing forms.[2] Arrangement, more than any other single factor, will determine the success or failure of a form.

Suggested Standards Relating to Forms

1. As to Identification of Form:
   (a) Choose shortest possible form name that is indicative of the purpose of the form; at the same time, avoid ambiguity.
   (b) Place form name in a conspicuous spot on the form, usually in upper left in order to reserve upper right space for filing reference data.
   (c) Make certain that form name indicates its purpose.
   (d) Give each form a form number; since number usually becomes the frame of reference, place it in a conspicuous spot, preferably right above the form name and print the number in large characters.
   (e) Place date of latest revision on each form, preferably in abbreviated form (3/2/47) and in lower left corner.

[2] Peak, G. W., "Standards for Business Forms," *Office Management and Equipment*, March, 1946, p. 33.

(f) Indicate quantity of form blanks reproduced by appropriate symbol or code in lower left corner.

(g) Number pages of form having more than one page, and place page number in upper right corner; indicate on each page the total number of pages (thus: 1 of 4).

(h) Provide for execution signature or signatures in lower right corner of last page of form unless there are compelling reasons to the contrary.

2. As to Filing Reference Data on Form:

(a) Provide spaces for entry of all filing reference data in upper right corner.

(b) Provide space for entry of date on each form.

(c) Place date space, where possible, in upper right in close proximity to filing reference data.

3. As to Arrangement within Body of Form:

(a) If form is to be used to take information from or pass information to another form, provide for same sequence of items.

(b) If the form is to be used to take information from two or more other forms, provide sequence of items to allow all information to be posted from first form, then from second form, and so on.

(c) Use box style wherever possible to conserve space and improve legibility.

(d) Provide a reference number or letter for each space to be filled in, and where columns are used, for each column, and where appropriate, for each line of the columnar space.

(e) Provide for checking lines or boxes where writing can be saved.

(f) Place boxes for checking optional items in front of the respective items to which they apply.

(g) Align spaces for tabular material on right hand side, thus:

Not this:	But this:	Or this:
Age...	Age.....	..... Age
Height.	Height.....	..... Height
Sex	Sex	..... Sex
Weight	Weight	..... Weight

(h) Where possible, allow exact spacing required for information to be entered on form to prevent use of unnecessary words in filling in the form.

(i) If form is to be sent from one person to another, provide proper spaces for "to" and "from."

(j) Avoid unnecessary horizontal ruling on forms.

(k) For forms to be filled in by typewriter, provide horizontal spaces in tenths or twelfths of inches and vertical spaces in sixths of inches; for forms to be filled in by hand, provide larger spaces; for forms to be filled in by special office equipment, provide spaces required by such equipment.

(l) Arrange forms that are to be filled in by typewriter so as to allow maximum efficiency in the use of tabular stops and vertical ratchet movements.

(m) Provide for cross-totals to check accuracy of computations where data consists of numbers to be entered in columnar or tabular fashion.
(n) Provide for use of window envelopes, where possible, if form is to be mailed.
(o) Use space "layout" sheets in designing forms to save time and effort.
(p) Consult actual users of form for suggested improvements, additional requirements, and possible elimination before "freezing" the design.

4. As to Instructions for Use of Form:
(a) If form is used by a large number of persons and infrequently by some of them, or is used to convey instructions to outsiders, print instructions on form (use front of form where space is available; otherwise use back of form).
(b) If form is used frequently by the same persons, especially where all space is needed for entries on form, print instructions separately, preferably as a part of the procedure manual or the form manual.
(c) Print long instructions in columns instead of clear across the page.

5. As to Form Dimensions, Borders, Edges, Bindings, and Backs:
(a) Limit dimensions to sizes that will fit the usual office machines and filing equipment, preferably to $8\frac{1}{2} \times 11$ inches or multiples thereof.
(b) Provide for dimensions that can be folded conveniently for envelopes, if form is to be mailed or transmitted over considerable distances.
(c) Use form border, since, contrary to what it would seem, this usually gives more horizontal space, the typist using all the space inside the border line and not allowing extra, unneeded margin.
(d) Wherever possible except for the smaller sizes, arrange forms so that the shortest side feeds into the typewriter.
(e) Use continuous-feed forms where practicable to save typewriter insertions.
(f) Avoid small forms having perforations on one or more edges where this increases difficulty in filing.
(g) Leave appropriate margins to allow for the holding of the form by the reproducing equipment.
(h) Where form is to be bound, leave appropriate margin at left side, top or bottom.
(i) Leave $\frac{1}{3}$ inch margin or more at bottom of form to prevent slipping in typewriter.
(j) Provide for binding of blank forms in convenient size book where they must be carried around and filled in away from an office.
(k) Use pre-inserted, one-time carbon forms where labor is important part of operation in filling in large numbers of forms.
(l) Utilize back of form instead of second sheet if legibility can be retained or if checking from one sheet to the other is not involved.
(m) Print head to head where back of form is utilized and form is to

mean Form 17 used by the sales department. The roman numeral M prefaced by the number of thousand forms printed usually is used to indicate the quantity printed. The month of the year expressed in number form should also be indicated. If these symbols are used, the number S21-9M-3-47 would mean that the particular form was a sales department record, No. 21, that 9000 had been printed, and that they had been printed in March, 1947.

Private printing plants versus purchased printing. In a small organization the question as to whether the company should print its own forms or have them done by an outside printer seldom arises, since it is obvious that the former method would be impractical from the expense standpoint alone. Many such concerns, however, as well as larger organizations, are making increasing use of reproduction methods other than printing, such as the stencil, offset, multigraph, and spirit duplicator processes. In a number of cases the results secured are equally satisfactory from the point of view of practical utility, while the cost is substantially lower.

In the case of large companies, it may seem that the establishment of a company printing plant would be advantageous, from the standpoint of both cost and service. While there is little doubt that, because of direct company control, better service can be obtained in such cases, the amount of money actually saved is often not so much as one might expect. Direct salaries for the printing-department employees mount to unexpected figures, and the investment in printing-plant equipment, as well as the cost of maintenance and repairs, is relatively high. Unless the company is very large, a considerable amount of time when the equipment is idle must be charged against the job turned out by the company-owned printing plant. Few firms have enough work to keep the presses running continually. Moreover, it is difficult to secure and hold experienced workers in the small shop where the volume of work varies considerably. Furthermore, a company printing shop managed by someone who is not an expert printer is at a great disadvantage when the quality and cost of its work are compared with that done by an outsider who has been in the business for many years.

For these and other reasons, a number of firms who formerly operated printing plants have discontinued them, retaining only a duplicating department, which is maintained for convenience and for the savings to be achieved in connection with short runs. The Metropolitan Life Insurance Company and The New York

Trust Company have done this, the Metropolitan change being of interest because of the size of the plant, which at one time employed 500 people. Other firms, such as the Shell Oil Company and Servel, Inc., produce most, if not all, of their office printing requirements in their own print shops.

Forms Control Program of the Standard Oil Co. of N. J.[3]

During the several years since the forms control and standardization program of the Standard Oil Co. of New Jersey was instituted at the company's Baton Rouge Refinery, it has resulted in many changes being made in forms used at the Refinery—changes which have saved both time and money for all concerned by speeding up their paper work and making it easier of accomplishment.

Fundamentally, this program is designed to effect all possible economies in connection with printing by (1) continually and substantially reducing the number of plant and office forms used throughout the company, and (2) standardizing and simplifying the size and design of all forms remaining in use.

Forms writing is a factor of major importance in a plant such as the Baton Rouge Refinery, with its varied and complex operations. It is not hard to understand, then, why a program geared to achieve the maximum efficiency in paper work, and at the same time manage to reduce printing costs, should be very desirable.

The unprecedented demand for the myriad forms required to run a vitally essential plant has taxed the ingenuity of the Printing Standards Division, but it has been able to "meet the boat" and, at the same time, has been able to heed the admonition "to continually and substantially reduce the number of forms."

When the standardization program was instituted there were in existence 2,250 forms. During the slightly more than four-year period from October 15th, 1940, to December 31st, 1944, 712 forms were added (principally because of war requirements), while 1,070 forms were eliminated through standardization. And this was accomplished while the local plant was expanding by leaps and bounds, increasing not only to twice its former size, but also multiplying its activities many fold. The advent of Government-operated plants, new operations and products, governmental restrictions and requirements, and the other activities of a plant exerting every effort towards the winning of the war, created a demand for a variety of forms far surpassing anything experienced before.

207 forms required reprinting or overprinting when the merger was accomplished. If this merger had taken place in 1940, it would have been a far different story. Virtually all of the 2,250 forms then in use would have required revision, which would have been a tremendous undertaking.

The forms control and standardization program for the Louisiana division is under the general management supervision of F. P. Hagaman, division comptroller, who coordinates local activities with those of other participating subsidiaries of the Standard Oil Co. (New Jersey). This coordination of efforts is effected through the technical and advisory supervision of the Printing Standards Division at 30 Rockefeller Plaza in New York.

The operation of the Printing Standards Division in Baton Rouge is composed of the Division Head, assisted by a trained staff consisting of a senior forms designer, a junior forms designer, and a forms data clerk and Varitypist.

What makes the Printing Standards Division click? Correct forms control and standardization is really a problem of two parts: physical standardization and functional standardization. Physical standardization is important, but it is obvious and comparatively easy, while functional standardization is not so easy, nor is it so obvious. But it is of much greater importance.

Intelligent physical standardization results in savings of paper, ink, composition and printing costs by achieving the maximum efficiency in the use of the company's printing plant at Baltimore. This is accomplished by the wise application of physical designing methods, combined with controlled requisitioning procedures. Although sizable savings are effected through physical standardization, the economies accomplished through scientific functional forms standardization are of greater magnitude.

What, then, is meant by functional standardization? It is an important distinction. The objective is to employ a designing technique which will give a form its greatest usefulness to all concerned; not just typographic beauty or conformity with standard sizes.

It is well to remember in this connection that a form which may cost from one to five cents to print, usually creates a "processing" or clerical expense of 15 cents to one dollar. When this fact is considered, it emphasizes the great desirability of designing forms in such a manner as to endow them with as much utility and efficiency as is possible, so that they can be speedily completed, intelligently interpreted, and easily filed.

Basic functions of forms. Analyzing the function of the form, therefore, is the first step in its proper design. Experience has disclosed that there are 18 basic functions being performed by forms used at Baton Rouge Refinery. Whenever one of them is used, it is expected to accomplish one of the following aims:

1. Adjust.
2. Apply.

3. Assign or specify.
4. Authorize.
5. Bill or claim.
6. Classify or rate.
7. Contract.
8. Direct or instruct.
9. Follow-up.
10. Identify.
11. Order or procure.
12. Receive or receipt.
13. Record or tabulate.
14. Report or notify.
15. Requisition or request.
16. Route or transmit.
17. Schedule.
18. Ship.

Which of the foregoing loads is the proposed form expected to carry? This is the first thing to be determined. By going to a cross-indexed file of forms it is possible either to suggest an existing form, or else to revise a somewhat similar existing form to serve the needs of the old and proposed forms. If it is ascertained that neither of these alternatives is feasible nor acceptable, a new form is inaugurated.

Evolution of a standard form. Figures 47 and 48 are two illustrations which permit graphic comparison of the evolution of a form from a non-standard to a standardized type. This particular form has been picked for illustration because it combines standards of designs from

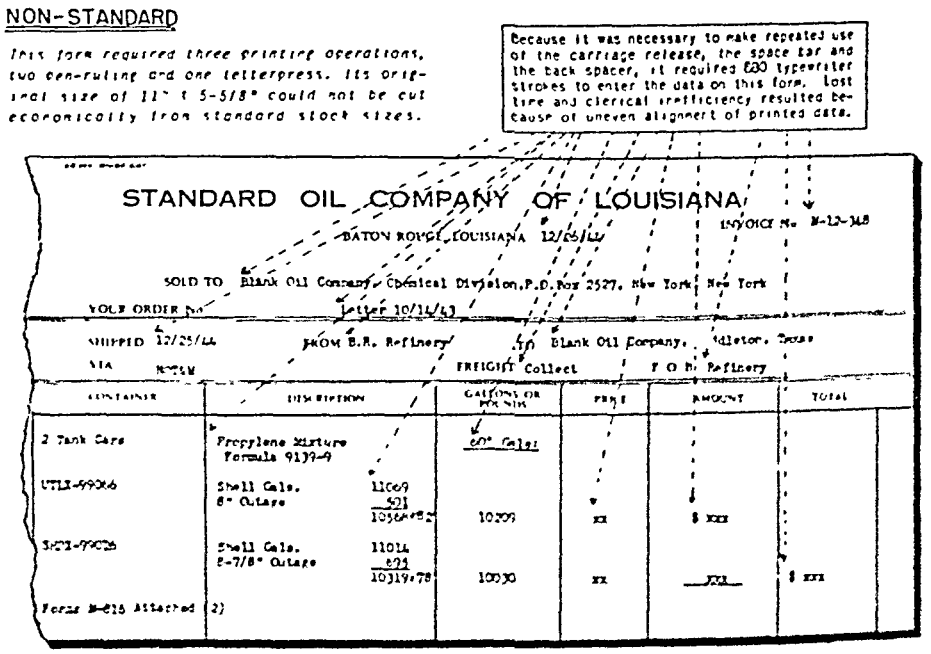

Fig. 47.—Form Before Standardization.

both physical and functional factors. It would have been possible to save several hundred dollars by merely applying physical standardization techniques to this form; but when it was discovered that it was being processed by several typists who worked full time on this one job, the advantages of both functional and physical standardization were pointed out to the supervisor.

Notice the arrangement of the printed data and rules on the "non-standard" form. When this form was conceived, the requirements of other personnel were overlooked. The typist, for example, was not able to use her machine efficiently on this form. The uneven alignment of vertical rules and printed data caused 15 starting positions for typed matter. The use of tabular keys was practically eliminated, thus necessitating the repeated use of carriage release, space bar, and back spacer to position her machine. Improper designing created a processing expense on this form which was greatly in excess of what it should have been.

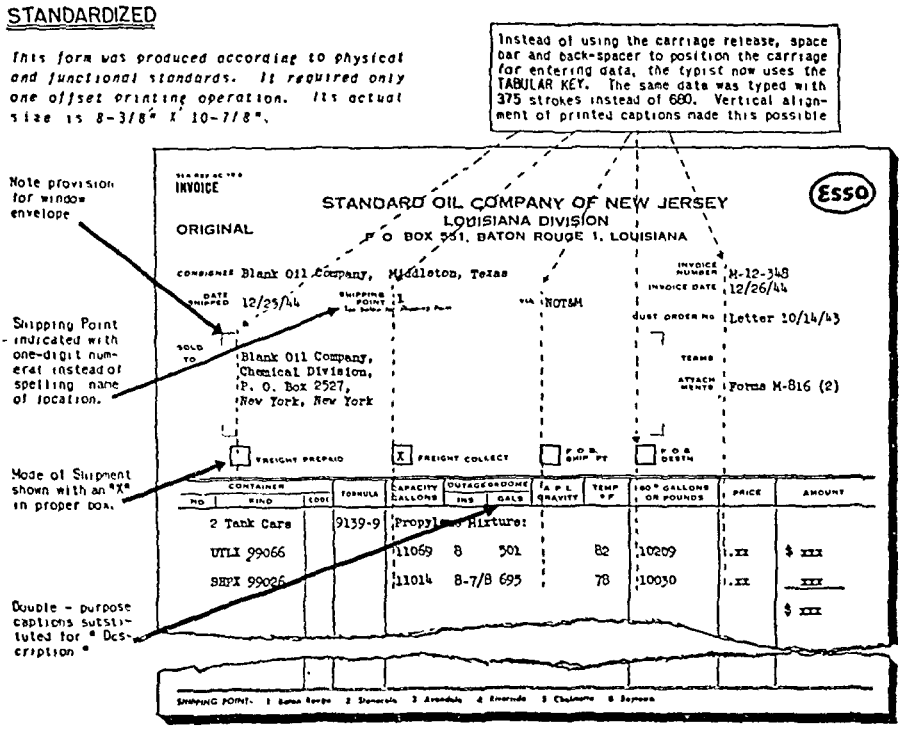

Fig. 48.—Form After Standardization.

has a triple responsibility: (1) to provide an efficient tool for the originator of the form; (2) to protect the interest of the receiver of the form; and (3) to be mindful of printing limitations, as well as to consider the possibilities offered by modern printing. With the assistance and cooperation of the originator, receiver, and printer of the form, the forms analyst is in the best position to increase efficiency in paper work and at the same time decrease printing expenses.

Printed forms are vital tools in the conduct of a plant such as the Baton Rouge Refinery. They are used almost everywhere and by a majority of employees. Since it is of major importance that the best tools be obtainable for every job, and that they be made available at the proper time, the Printing Standards Division is cooperating to that end by keeping alert to all the possibilities offered by the new forms designing developments which have received such a tremendous impetus in recent years.

Western Electric's form standards. In a previous discussion of standardization of equipment, reference was made to the Western Electric Company program. This program pays particular attention to form design and standardization: [4]

Office forms, both those of a general nature (applicable to two or more departments) and those of a departmental nature (used in or useful to only one department) are considered of sufficient importance to warrant special attention independent of other items of office supplies.

A supervisor of form standards is responsible to the committee for setting up general standardization, and for design, suitable specifications and sample files, and necessary information relative to general forms. He also studies departmental forms, primarily to determine whether their design and physical specifications are in accordance with the standards established by the committee and published in a form-design manual. As a by-product of such a study he calls attention to the possibility of simplification and improved utility and suggests combinations or elimination of forms for such action as is considered desirable or appropriate by the individual department affected. He also recommends general forms to replace individual departmental forms which have a common use or similar characteristics.

How Servel controls its forms. The plan of inventory control of record forms in use at Servel, Inc., is interesting because of its attention to all the details necessary to an accurate and economical forms control plan.[5]

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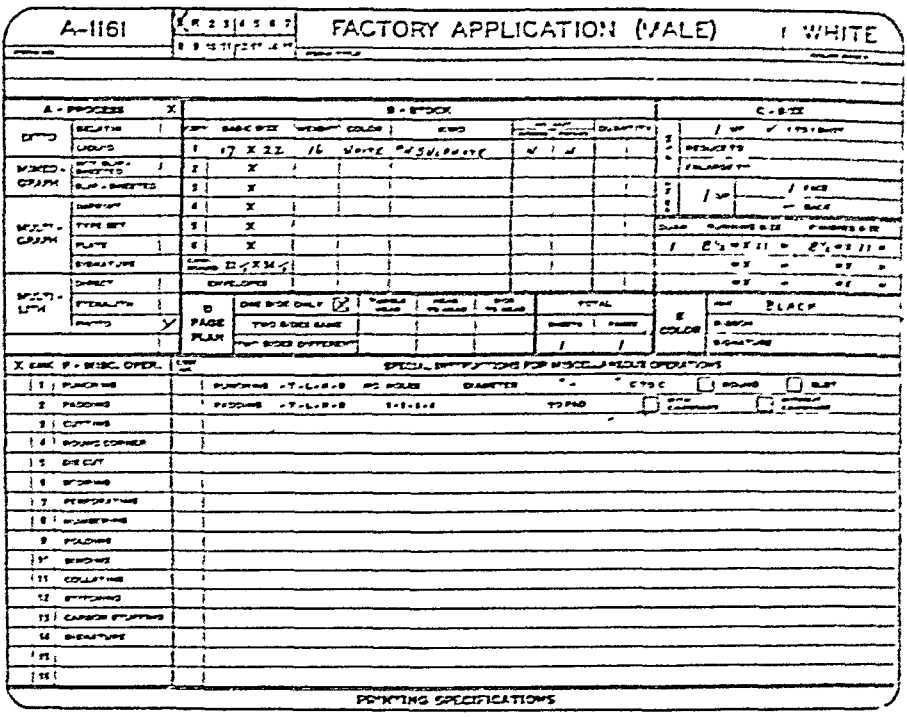
[4] Gage, E. B., "Standards for Office Equipment," NOMA *Forum*, National Office Management Association, October, 1945, p. 9.

[5] Herrmann, I. A., "Standardization of Record Forms," *Office Management Series* No. 103, American Management Association, 1944, p. 10.



FRONT

(SIZE 11 W. X 8 1/2 H.)

BACK

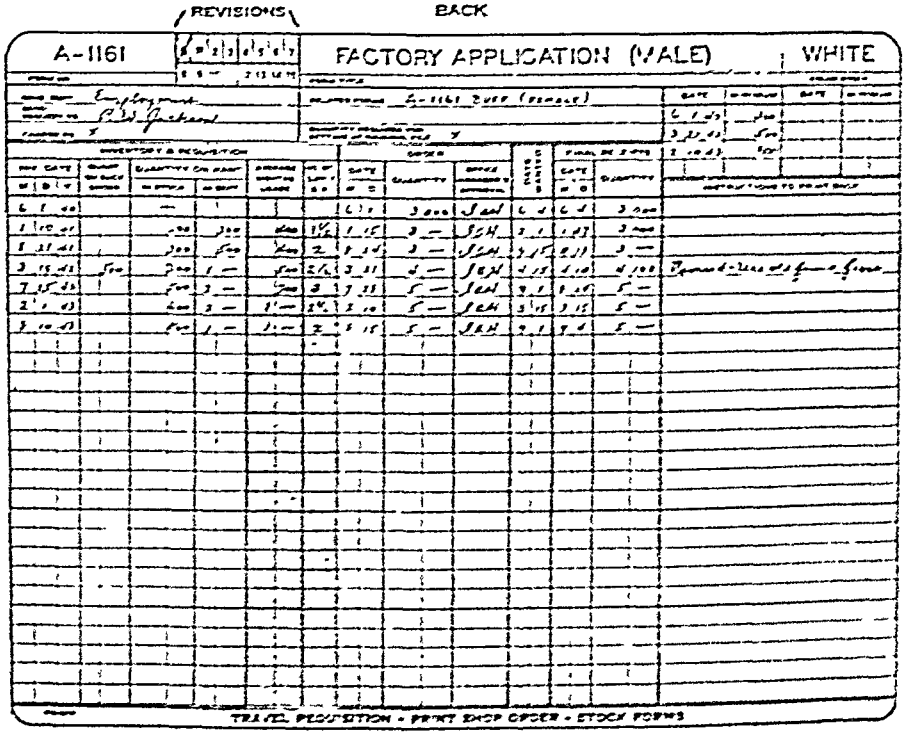
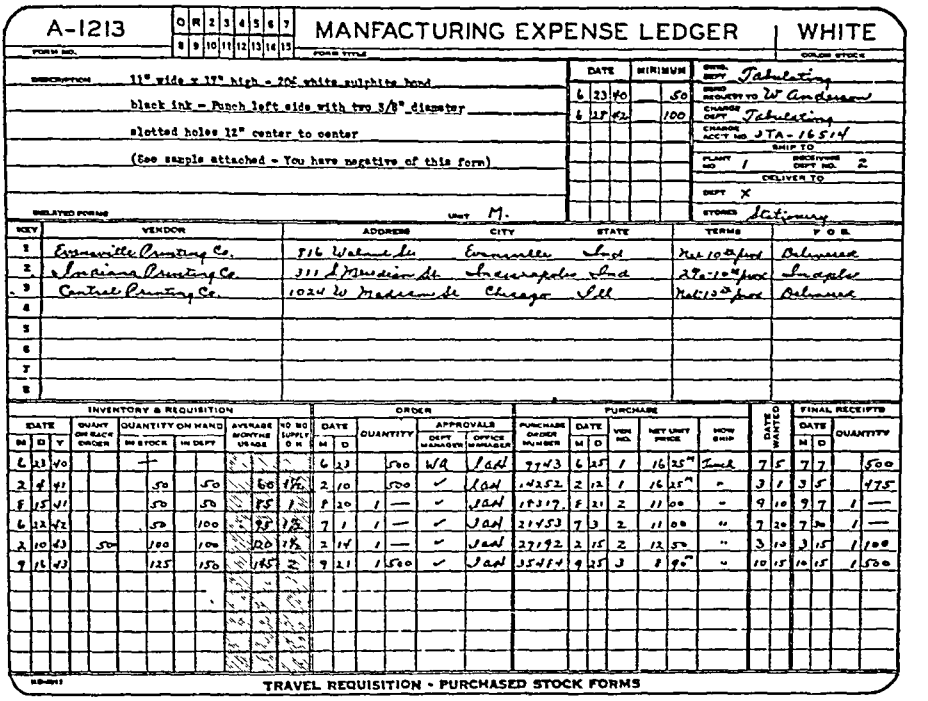


Fig. 50.—Internal Printing Specification Record.



A-1213 | O R 2 3 4 5 6 7 / 8 9 10 11 12 13 14 15 | MANFACTURING EXPENSE LEDGER | WHITE

FORM NO. — FORM TITLE — COLOR STOCK

DESCRIPTION: 11" wide x 17" high - 20# white sulphite bond
black ink - Punch left side with two 3/8" diameter
slotted holes 12" center to center
(See sample attached - You have negative of this form)

DATE			MINIMUM	
6	23	40		50
6	28	42		100

ORIG. DEPT: Tabulating
SEND REQUEST TO: W Anderson
CHARGE DEPT: Tabulating
CHARGE ACCT NO: JTA-16514
SHIP TO: PLANT NO 1 — RECEIVING DEPT NO. 2
DELIVER TO: DEPT X
STORES: Stationery

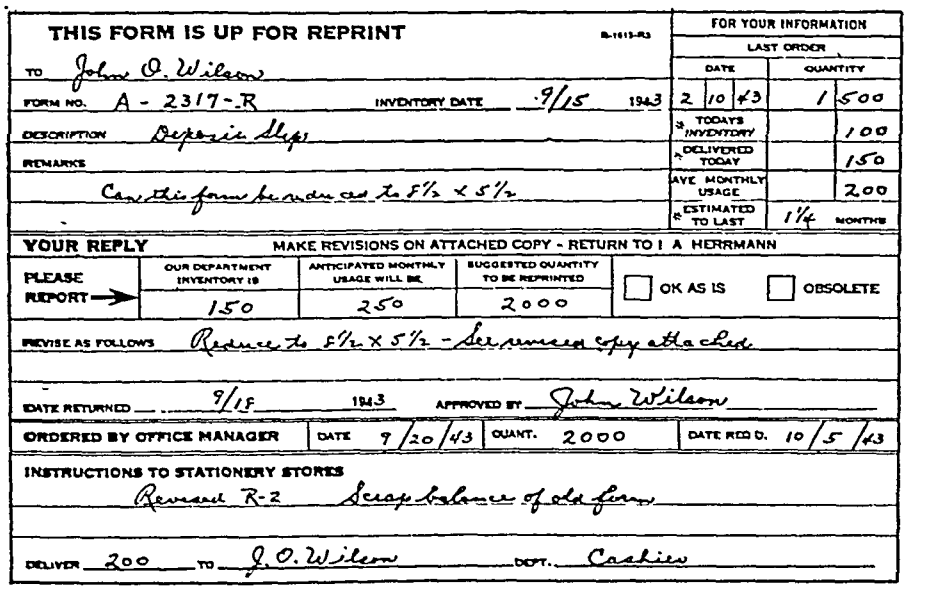
RELATED FORMS — UNIT M.

KEY	VENDOR	ADDRESS	CITY	STATE	TERMS	F.O.B.
1	Evansville Printing Co.	816 Walnut St	Evansville	Ind	Net 10th prox	Delivered
2	Indiana Printing Co.	311 S Meridian St	Indianapolis	Ind	2% 10th prox	Indpls
3	Central Printing Co.	1024 W Madison St	Chicago	Ill	Net 10th prox	Delivered
4						
5						
6						
7						
8						

INVENTORY & REQUISITION: DATE M	D	Y	QUANT ON BACK ORDER	QUANTITY ON HAND: IN STOCK	IN DEPT	AVERAGE MONTHS USAGE	NO NO SUPPLY O K	ORDER: DATE M	D	QUANTITY	APPROVALS: DEPT MANAGER	OFFICE MANAGER	PURCHASE: PURCHASE ORDER NUMBER	DATE M	D	VEN NO.	NET UNIT PRICE	HOW SHIP	DATE WANTED	FINAL RECEIPTS: DATE M	D	QUANTITY
6	23	40		—				6	23	500	WA	JAN	9743	6	25	1	16 25M	Truck	7	5	7	7	500
2	4	41		50	50	60	1½	2	10	500	✓	JAN	14252	2	12	1	16 25M	"	3	1	3	5	475
8	15	41		50	50	85	1	8	20	1 —	✓	JAN	18317	8	21	2	11 00	"	9	10	9	7	1 —
6	22	42		50	100	95	1½	7	1	1 —	✓	JAN	21453	7	3	2	11 00	"	7	20	7	30	1 —
2	10	43	50	100	100	120	1½	2	14	1 —	✓	JAN	27192	2	15	2	12 50	"	3	10	3	15	1 100
9	16	43		125	150	145	2	9	21	1 500	✓	JAN	35484	9	25	3	8 90M	"	10	15	10	15	1 500

TRAVEL REQUISITION - PURCHASED STOCK FORMS

FRONT (SIZE 11 W. X 8 1/2 H.)



THIS FORM IS UP FOR REPRINT — B-1613-R3

TO: John O. Wilson

FORM NO. A - 2317 - R — INVENTORY DATE 9/15 1943

DESCRIPTION: Deposit Slips

REMARKS: Can this form be reduced to 8½ x 5½

FOR YOUR INFORMATION		
LAST ORDER	DATE	QUANTITY
	2 10 43	1 500
TODAYS INVENTORY		100
DELIVERED TODAY		150
AVE MONTHLY USAGE		200
ESTIMATED TO LAST		1¼ MONTHS

YOUR REPLY — MAKE REVISIONS ON ATTACHED COPY - RETURN TO I A HERRMANN

PLEASE REPORT →	OUR DEPARTMENT INVENTORY IS	ANTICIPATED MONTHLY USAGE WILL BE	SUGGESTED QUANTITY TO BE REPRINTED	☐ OK AS IS ☐ OBSOLETE
	150	250	2000	

REVISE AS FOLLOWS: Reduce to 8½ x 5½ - See revised copy attached

DATE RETURNED 9/18 1943 — APPROVED BY John Wilson

ORDERED BY OFFICE MANAGER — DATE 9/20/43 — QUANT. 2000 — DATE REQ'D. 10/5/43

INSTRUCTIONS TO STATIONERY STORES: Revised R-2 Scrap balance of old form

DELIVER 200 TO J. O. Wilson DEPT. Cashier

(SIZE 8 1/2 W. X 5 1/2 H.)

Fig. 51.—External Printing Specification Record.

package), the travel requisition is pulled from the file, the date and inventory recorded, and the card with two samples of the form attached is sent to the office manager as the requisition for reprint.

A request for authority to reprint, illustrated at the bottom of Figure 51, is prepared and sent, with a sample form attached, to the supervisor of the originating department. This form serves three purposes: (1) It is a request for reprint, giving inventory statistics; (2) it is used as a reply from the supervisor, giving anticipated usage and authority for revision; and (3) it serves as a notice to the stationery stores that the order has been placed for a definite quantity to be delivered on a specific date.

After the above report has been returned from the department supervisor, the travel card is pulled from the open file, and the order portion and date wanted are recorded. If the form is to be printed by us, the buff travel card is sent to the print shop. If the form is to be purchased on the outside, the salmon travel card is sent to the purchasing department. The travel cards are returned to the stationery stores and are used repeatedly on future reorders.

In addition to providing a good inventory control, the travel requisition plan saves considerable time by eliminating the necessity of rewriting printing orders or individual requisitions. It also gives a running history of the form, which is valuable for establishing minimums and for determining the reorder quantity.

How Servel Reduced Printing Costs

Forms reproduced in Servel print shop:

1. Paper stock is purchased in carload lots.
2. The quality, weight, color, and ream size of paper used is limited to as few items as possible.
3. Stock is bought in ream size and cut to requirements on our paper cutter.
4. Standard-size sheets are used to get the best cut from ream size without waste.
5. Forms are designed to the smallest standard size practical, so that the maximum number of copies can be printed on the single master, stencil, or plate.
6. White stock is standard. (The cost is 10 per cent less than colored stock.)
7. No. 4 sulphite is standard. (The quality is satisfactory for most work and the cost is considerably less than that of the better grades.)
8. Sixteen-pound stock is standard for jobs printed one side. (The cost is 10 per cent less than that of the 20-pound.)
9. Twenty-pound stock is standard for two-page jobs. (There are considerable savings on paper and collating. Its use also reduces the weight for mailing.)
10. Mimeograph stock is eliminated. Water-soluble ink is used on No. 4

eliminates re-running the job to get the first number on top.

(b) Hand stapling machines are placed in gangs and are attached to our foot-power paper drill. This permits placing two or more staples at the same time.

(c) A fork-arrangement paper divider is used for padding. This eliminates counting the sheets.

(d) Dealer literature is imprinted on the multigraph. A special feed guide was developed to feed two small circulars at the same time, which doubles the machine production.

(e) A special collating rack was developed. This consists of two tiers of shelves, each shelf holding a ream of letter-size paper. The paper is fanned so that the top sheet protrudes forward. The person collating uses both hands and works from the bottom up by removing the top sheet from each stack and holds on to the gathered sheets until the top stack is reached.

Forms purchased outside. Printing is purchased outside on jobs that can be bought more economically, or where the size is larger than the capacity of our equipment. Most of the forms purchased are reproduced by the offset method. We furnish the printer with the completed master ink copy ready for photographing. This eliminates expensive composition or layout cost and the necessity of obtaining proofs.

18

Reports Used by the Office Manager

As a practical matter, however, it is not always easy to decide what the content of a report should be. For example: The office manager, confronted with the task of preparing a report on a new layout for the office departments, may feel at first thought that a statement or plan of the present layout, together with the reasons why it is not as good as it should be, and a similar presentation of the proposed new layout, should comprise the essential features of his report. When, however, he starts the actual work of report preparation, related questions begin to arise in his mind. Should the report attempt to forecast the future needs for office space? Or is such a forecast, depending as it does on the anticipated increase in business, and on the general plans and policies of the company for the future, a matter that might better be left to other administrative officials? Should only one plan be presented, or should several possible arrangements be outlined? To what extent should costs be discussed? There is always the danger of intruding on what others may consider their legitimate field of work. Obviously, therefore, careful consideration must be given to the exact content of the report, particularly one of the kind just mentioned.

The second point to be borne in mind in preparing reports is that the person for whom the report is prepared is usually interested primarily in results and final recommendations rather than details. This statement is not made with a view of disparaging in any way the practice of many competent and successful executives, who carefully analyze and study details in order that they be fully familiar with all the facts in the situation. The report writer must remember, however, that most executives have many things to think about. Whenever possible, long, involved explanations should be avoided. If statistics or numerous figures must be presented, the use of a graph or a chart will be found helpful.

Clarity, conciseness, accuracy, and logical arrangement and presentation of subject matter are also fundamental to the preparation of good reports. Nothing destroys the value of a report more quickly than vagueness, generalities, lack of precise statements and recommendations, or errors in facts and figures. The report writer should never lose sight of the fact that the primary purpose of all reports is to convey information and to secure action. If the "facts" in the report are incorrect, little reliance can be placed on the conclusions and recommendations. Likewise, a report characterized by an executive as "very interesting" or "well worth think-

ing about" is more often than not a failure, for the reason that it does not result in some positive action being taken.

Kinds of reports. The kinds of reports with which the office manager is concerned may be classified under three headings: (1) periodic departmental reports, (2) administrative or executive reports, and (3) special reports. Each will be considered separately in the order named.

Periodic departmental reports. Periodic departmental reports, such as monthly reports of operations, which the executive may require from each department head, are regularly prepared in many offices. Departmental records of performance usually form the basis of such reports. In fact, a summary of the data contained on these records, with an explanation of all unusual items, often comprises the principal substance of such reports.

It is important that the detailed records be kept in such a way as to facilitate their use for report purposes. An illustration from the practice of the sales department of a well-known concern aptly illustrates this point. Each of the 250 traveling salesmen is required to send the sales manager a weekly report of his activities. This weekly report contains the kind of information usually found in reports of this type, such as the total number of calls made on customers, calls made on prospects, value and volume of sales made, amount of dealer-help material distributed, notations as to the items in the line in which there seems to be a special amount of customer interest, and so on. These reports form the basis for the sales manager's monthly report to the general manager.

Clerks in the sales department summarize the information contained in the individual reports. To facilitate the preparation of the monthly summary, the various columns of the salesman's reports are so arranged that the clerks require a minimum amount of time to transfer the information to their summary sheets. There is no need for a reclassification of the information in a different form from that in which it is received by the sales office. The net result is that the time the clerks spend each month in summarizing this information for the sales manager, which, to a certain extent, is time that must be taken from other work, is cut to the minimum. Coördination of the form of periodic departmental reports with the detailed records upon which they are based, is a step which often results in eliminating much of the burden that frequently accompanies the preparation of such reports.

Use of the questionnaire method. One company found it advis-

able to prepare most of their routine sales reports in what might be termed the "questionnaire form." The various points on which information is desired are listed on a printed sheet, so that the report can be completed merely by inserting figures or brief comments. Sometimes simply a check mark serves the purpose. Whenever it is practical, this practice is well worthwhile for several reasons. It saves time in preparing the reports. The salesmen do not raise the objection that it adds excessive red tape to their regular duties. It also insures that the report will include all the necessary data, as nothing can be overlooked. Finally, it is of great help in analyzing the reports, as one quickly gets accustomed to looking for certain information in a certain place on the form.

Type of Information Usually Contained in Periodic Reports [1]

Periodic reports of clerical activities usually indicate the volume, speed, accuracy, and cost of the work, so as to show whether a given quantity of work is handled with a desired degree of accuracy in a reasonable time and with due economy, taking service into consideration. Since each situation is likely to differ from others, specific rules for devising such reports are hard to give. The reports should normally show: (a) the volume handled, and the amount on hand, splitting up the figures of the different kinds of work if they vary in importance or difficulty; (b) the number of errors and the percentage of accuracy; (c) the speed with which the work is being completed, or the number and proportion of cases not being handled on schedule; and (d) the cost of doing the work, considering often only the major items of easily measured costs. These data should be shown for the current period and in comparison with other periods or with a budget or standard, and should be accompanied by brief comments explaining any unusual items.

Monthly Report for a Policy-Issue Department in a Life Insurance Company [2]

Figure 52 illustrates a suggested monthly report for the policy-issue department of a large life insurance company. Comparisons are made with the preceding month on a monthly basis and with the preceding year on a year-to-date basis. If there is normally a wide variation between the various months, comparisons with the same month of the previous year might be substituted for the comparison with the preceding month. A quota, a budget figure, or a standard performance, if worked out for a department, should be shown along with the actual accomplishment; otherwise a figure for the average volume may be given.

Accuracy is reported only insofar as the errors affect persons outside

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[1] Reprinted by permission from *The Office Supervisor*, by H. E. Niles and M. C. H. Niles, published by John Wiley and Sons, Inc.

[2] *Ibid.*

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Periodic reports of clerical activities usually indicate the volume, speed, accuracy, and cost of the work, so as to show whether a given quantity of work is handled with a desired degree of accuracy in a reasonable time and with due economy, taking service into consideration. Since each situation is likely to differ from others, specific rules for devising such reports are hard to give. The reports should normally show: (a) the volume handled, and the amount on hand, splitting up the figures of the different kinds of work if they vary in importance or difficulty; (b) the number of errors and the percentage of accuracy; (c) the speed with which the work is being completed, or the number and proportion of cases not being handled on schedule; and (d) the cost of doing the work, considering often only the major items of easily measured costs. These data should be shown for the current period and in comparison with other periods or with a budget or standard, and should be accompanied by brief comments explaining any unusual items.

Monthly Report for a Policy-Issue Department in a Life Insurance Company [2]

Figure 52 illustrates a suggested monthly report for the policy-issue department of a large life insurance company. Comparisons are made with the preceding month on a monthly basis and with the preceding year on a year-to-date basis. If there is normally a wide variation between the various months, comparisons with the same month of the previous year might be substituted for the comparison with the preceding month. A quota, a budget figure, or a standard performance, if worked out for a department, should be shown along with the actual accomplishment; otherwise a figure for the average volume may be given.

Accuracy is reported only insofar as the errors affect persons outside

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[1] Reprinted by permission from *The Office Supervisor*, by H. E. Niles and M. C. H. Niles, published by John Wiley and Sons, Inc.

[2] *Ibid.*

of the department. Errors made and caught within the department are not considered in this report. Sometimes it is well to consider in a departmental report the errors made in one division of the department and caught in another, as this will reflect the accuracy of the department as a whole; but such errors should not be grouped with the ones which leave the department, as these are usually of more consequence.

Speed of handling the work is treated in three ways in the report. First, the oldest case in the department is recorded to show whether any cases are taking an excessive time. The causes of the delays may also be shown. The next speed analysis is from the point of view of the applicant. This will be affected by how well the agent filled out the application blank, by how many requests for special information the underwriting department sends out, and by other factors which will be quite outside of the control of the issue department. However, the company will be judged partly by the speed with which it gets its policies into the hands of the applicant. To the head of the issue department this record has less importance than the third analysis, which shows the speed with which the cases are handled in his department, once the complete data are received.

The cost figure includes only clerical salaries, with adjustments for clerical time borrowed from other departments or actually lent to them. The net salary cost per policy issued is taken as a workable measure of efficiency from the point of view of cost. Next to it is shown the average salary per clerk. If this tends upward while the cost per policy issued tends downward, the situation is very satisfactory and indicates good management.

Under "Remarks" is provided space for recording the excess clerical time available to other departments but not used by them. This presupposes an arrangement for shifting. A consistently large figure for time lent or available for lending indicates that a permanent reduction of staff in the department might be desirable, and that the situation should be reviewed.

MONTHLY REPORT ON NEW BUSINESS ISSUED 19

Volume	This Month	Last Month	Year to Date This Year	Year to Date Last Year
New policies mailed during period.....				
Changes mailed during				
Approved applications on hand end of period				
Accuracy				
Number of policies returned from field for correction of errors				
Errors in records, etc., found by other departments				
Speed of Issue				
Oldest case on hand at close of period.....				

Speed from Applicant's Point of View

Working Days from Date First Papers Received Until Policy Released

Working Days	This Month No. of Cases	This Month Per Cent	Last Month's Per Cent	Per Cent Year to Date This Year	Per Cent Year to Date Last Year
Same day					
One day					
2 days					
3 days					
4 to 6 days					
7 to 9 days					
10 to 12 days					
13 days or more					
Total					

Speed of Issue in Department

Working Days from Date Last Papers Received Until Policy Issued

	This Month	Last Month	Year to Date This Year	Year to Date Last Year
Number of policies issued on same working day				
Per cent issued on same working day.....				
Number issued with 1 day's wait.....				
Per cent issued with 0 or 1 day's wait.....				
Cost				
Total number of clerks in department.....				
Policies issued per clerk				
Total salary cost of department.....				
Less credit for time lent other departments				
Plus charge for time borrowed from other departments				
Net salary cost.....				
Net salary cost per policy issued.....				
Average salary per clerk regularly in department				

Fig. 52.—A Typical Monthly Control Report.

nual departmental executive report. The primary purpose of this report, which may be prepared by each department head for the chief executive, usually the president or general manager, is to summarize the results of the year's operations. It may also contain recommendations for the coming year. Clarity, conciseness, accuracy, and logical arrangement of subject matter, which have been previously mentioned, are applicable to the preparation of reports of this type. It is particularly desirable that annual departmental executive reports emphasize essentials and results rather than details. In writing the report, the departmental head should remember that matters that may be important to section supervisors in their daily work, and to him as the department head, are for the most part mere details from the point of view of the chief executive.

An office manager's annual report. The following extracts from an annual departmental report prepared by the office and personnel manager of a well-known company illustrate the main points of reports of this kind:

OFFICE SERVICE DEPARTMENT ORGANIZATION

The following comprises a list of the more important changes in the activities of the department during the year. Each has been undertaken with a view to improvement in service, decrease in cost, or both:

1. In March, arrangements were made for a closer control over all mimeograph, multigraph, and typing work requested to be sent outside, with a view to doing as much of this work as possible here, thus giving the same service, in point of time and quality, to the departments but at a considerably reduced cost. The results of this arrangement have been most gratifying, resulting in actual savings which can be definitely calculated at $6128.

2. As a result of the operation of the bonus plan in the typewriting department, we have actually spent $3600 less in 19— than in 19—, despite an average increased production per employee of approximately 33⅓ per cent.

3. Effective November 21, Mr. Edwards, head of the Shipping and Receiving Department, was transferred from Mr. Payne's department to the Office Service Department, reporting directly to the writer.

4. Arrangements were made for providing additional and better service for the collection of dictating-machine cylinders.

5. A study of the special jobs which information clerks and others were called upon to do revealed the fact that to have an employee attached to the Office Service Department but available on call to any department having need of extra service for a few days to tide over a peak load, to fill in during vacations, or to take the place of a regular employee absent on account of sickness, would be a desirable plan. Such a person has

of a better control of the work done and the reduction in needless expense. We can point directly to a total of $11,354 saved in 19— in comparison with 19—. This is equivalent to the average net profit on $100,000 to $125,000 of gross income.

Third, the special surveys and studies already completed have not only put into writing things which were merely a matter of personal knowledge before, but have also pointed the way to better organization procedure and methods. This work, in turn, has created on the part of executives, department heads, and others a greater appreciation of the value of proper organization and management. The list of special surveys and reports already requested and planned for 19— as given above, indicates clearly the trend of executive thinking on these matters.

In closing this report, I should be most ungrateful if I did not acknowledge with very sincere appreciation and thanks not only your own constant helpful guidance and constructive criticism, but also that of all of the executives of the company, and particularly that of Messrs. Robertson and Reader.

Respectfully submitted,

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Office and Personnel Manager.

Special reports. As the name implies, special reports cover all unusual or special matters not included in periodic departmental administrative or executive annual reports. Inasmuch as the subject matter of special reports is surrounded by specific local conditions, it is difficult to outline a procedure that will be applicable in all cases. The method of securing the information, whether by questionnaire, by personal interview and investigation, by learning of the experience of others through books or magazine articles, or by a combination of all three, is one of the first questions to be decided. In a word, the first step is to determine as completely as possible the scope of the investigation.

Content of the special report. Since the form itself has much to do with the impression that the special report makes on the reader, it is of importance that the report writer be familiar with this phase of report writing. The content of the report should be divided into three main parts: (1) the introduction, (2) the body and (3) the summary or recommendations. The introduction usually contains the following: (1) the reason for the report or the authority on which it is made; (2) the kind of information that the report contains, or a brief statement of the subject of the report; (3) a statement of the way in which the material was secured, together with a list of all the sources of information used (or, if one wishes, reference to a complete list of sources may be given in the

too specifically what is wanted and when it is wanted. The subordinate is expected to produce, within the alloted time, the complete report, prepared in the proper form and showing the information desired.

A short time ago the writer had occasion to witness the difficulties and the resulting adverse reactions of an office manager who was called upon about 9:30 one morning to prepare by noon a certain kind of report for use by the president at a luncheon conference that day. By suspending work on everything else and working steadily without interruption, the office manager could have had the report prepared within the alloted time. However, the president called him into the office on other matters, most of which were more or less routine and could just as well have waited until later, no less than five times during the course of the morning. Naturally, the report was not completed on time, nor did the office manager become very enthusiastic, either about reports in general or about the methods of this particular chief executive.

Special reports have their place and most certainly are necessary to the successful conduct of a modern business organization; but the executive for whom they are prepared should appreciate the work that is involved in their preparation and should understand clearly the relation that they bear to regular work and to the general record-keeping activities of the company. In concerns in which the office manager has a direct interest in the preparation of all reports, there is a particularly good opportunity for him to bring about the proper coördination in this respect.

A special report on centralized employment. The following report on the desirability of establishing a centralized employment department for applicants for executive positions is a specific example of a well-prepared special report.

In accordance with the resolution of the Executive Committee, adopted at its meeting of March 23, I have been giving consideration to a general Company policy and plan for centralizing our employment work in connection with applicants for executive positions. I have discussed the matter with Messrs. Johnson, Hardy, and Lang.

My conclusions and recommendations are as follows:

1. The principle of further centralizing such employment activities is sound for the following reasons:

(a) By bringing together at one point a list of all requirements for employees, better control will be secured. As it is now, persons seeking such employment may be sent to any one of a number of departments or individuals.

(b) Centralization will enable us to give better service to the organization. Under our present plan, executives and department heads who have vacancies have no single person to whom they can go to secure specific assistance. Furthermore, transfers and promotions from within the Company, with the exception of rank-and-file workers, are difficult largely because there is no central clearing house through which the needs of all departments pass.

(c) Centralization will allow us to better develop our contacts with outside organizations. Both from our own point of view and from that of outside organizations, societies, institutions, and so forth, it is more economical and efficient to clear all matters of this kind through one point.

What is needed, in a word, is a centralized control and a centralized listing of all employment needs throughout the organization.

2. Any plan of centralization which may be adopted should be established on the assumption that the person in charge will make preliminary selections only. This is the principle now followed in connection with rank-and-file workers. As the nature of the position to be filled increases in importance and salary, the practical desirability and necessity of following this principle quite obviously arises also. The central clearing house should be simply a service activity, established to aid executives and department heads.

3. Such a centralized function should confine its efforts, for the present at least, simply to caring for our own needs. Our ability to be of assistance to outsiders will develop gradually and naturally from this. An attempt to render too far-reaching a service might easily consume an unwarranted amount of time. However, to discover specifically just what types of calls may be made on us by customers, friends, and others outside the Company, I suggest that these requisitions be passed on to the central clearing house as they are received. As we develop a centralized plan for caring for our own needs, we will be in an increasingly better position to help others, particularly as it seems likely that some contact work will be necessary for our own purposes.

4. For the present, I suggest that Mr. Todd, or someone designated by Mr. Johnson and Mr. Smith, or someone else designated by Mr. Lang, continue to interview applicants for positions in their respective fields. However, instead of interviewing all who apply, as is the case now, the person in charge of the central clearing house should talk with all applicants first, sending on to Messrs. Todd and Smith only those whose training and experience appear to warrant further investigation.

5. If the principle of centralization of employment is approved by the executive committee, either along the lines suggested in the previous paragraphs or along others, a memorandum should be prepared stating the policy and plan adopted, naming the person appointed to handle the work, and requesting the staff to list their needs at the central point. In this memorandum emphasis should be laid on the fact that personnel needs arising from a desire to replace present employees with better ones, as well as needs due to specific vacancies, should be listed. In

addition, the staff should be urged to notify us of competent persons who are seeking positions and whose experience and training might be of value to us.

I believe that the policy and plan outlined in the previous paragraphs will be found to be practical and effective, yet simple enough so as not to be an undue burden on any single person or group.

Eliminating unnecessary reports. While periodic, executive, and special reports are essential in every business organization, it is undeniably true that in many cases an undue amount of time, money, and energy are spent in their preparation. This is particularly likely to be so in the case of periodic departmental reports. Unnecessary reports are a great economic waste. The elimination of as many of these as possible would bring about a saving in clerical and supervisory pay rolls, and in materials and equipment. Since the progressive office manager is concerned, both directly and functionally, with effecting economies, he should be especially watchful to see that all reports are necessary and that they are of practical utility to those for whom they are prepared.

Two typical examples of unnecessary reports. Two instances which came to the author's attention are of interest because they illustrate the waste involved when reports are not carefully controlled. In one concern it is the duty of one clerk to read certain classes of incoming mail daily, abstracting the salient points of the correspondence which would be of interest to departmental executives, and preparing a daily report which is then duplicated and distributed to these men. A long while ago, one of these daily reports failed to reach the supervisors because somewhere between the clerk's dictating machine and the duplicating room the report was lost. At that time an elaborate report was devised which recorded the time the mail was received, the time the clerk started dictating, the time he finished dictating, the time the record was transcribed, the time the master was returned to him for checking, the time it was sent to the duplicating department, and the time they finished the duplicating work and put it in the outgoing mail basket. The thought behind all this, of course, was to attempt to prevent the loss of any future abstracts or fix the blame should they go astray. What was entirely overlooked was that this error had occurred but once in the long history of this abstracting task, and that the cost of producing this report was much greater than the benefits it yielded. Consequently, for years this report continued in existence. At first, the manager inspected the report

report of all customer claims received. This report gave the details of each claim at great length and had been originated during a time when the quality of the product had become uncertain and efforts were being made to improve it. Obviously, the president felt that he was keeping in touch with the customers' reaction to the product and that the report was therefore justified. He entirely overlooked the fact that 70 per cent of the report consisted of histories of claims which were not concerned with the product and which had to do with losses in transit and material damaged in transit. The ratio of these cases to the total business was normal in the light of experience of other companies with their transit claims. This report continued in existence daily for some twenty-two years and required three to four hours of clerical time daily to prepare it. To make matters worse, a number of copies were circulated throughout the organization, some seven in all. Recently, a new manager came to the claim department and, in the course of his investigation of the activities of his clerks, discovered the report. When the matter was called to the attention of the executives who received it, all agreed that the report served no useful purpose and it was immediately discontinued. However, over these years each of the seven copies had been meticulously filed away in seven different departmental files. The waste, of course, was enormous.

Figure 54 illustrates a simple form which can be used to inventory the reports that are being compiled within an organization, in preparation for a study to simplify some and eliminate others.

Dr. H. A. Hopf, speaking before the Office Management Association of Chicago, suggested the following method to eliminate useless reports.[5]

Psychological Cost Control

Here is a method, thoroughly tested in practice, of eliminating unnecessary clerical work:

After ascertaining as accurately as possible the total costs involved in the preparation of reports deemed to be unnecessary, the office manager should quietly affix to the top page of each such report a large label imprinted in red with the following text: "The cost of preparation of this report is . . . . dollars per month. Do you wish it continued and this cost charged to your department?" All he need do while the reports make their rounds through the office is to sit back and await results. They may be slow in coming, but sooner or later they are

[5] Hopf, H. A., *Management Review*, American Management Association, October, 1943, p. 367.

bound to present themselves, for the psychological effect of the label is well-nigh devastating.

Mr. J. H. Barrett, of the Murray Corporation of America, made these comments on reports for the use of management: [6]

Not the least of the salesmen among us are those who have responsibilities for the design and form of reports for management use. These authors have a great responsibility in an enterprise of any complexity. They need real salesmanship to put across their ideas to management in such concise, undistorted and fool-proof form that management not only will not be deceived as to their import but will be able to take proper action on them.

Emphasis cannot be placed too strongly on the cardinal principle of good salesmanship that the product must be good for the buyer or repeat orders will not be forthcoming. The report must satisfy the Boss; it must lead him to sound conclusions and effective action, or your days as an author are numbered. That is where your salesmanship has to meet its most exacting test. It is futile to insist that the Boss accept your reports prepared in the manner and form of your preference. You should, of course, have the opportunity of selling your ideas to him, but reports are made for the user and not for the maker.

Perhaps you have had an experience similar to one which I had about thirty years ago, just before I was given my first executive position. The manager of the accounting department in which I worked was sorely beset because the board of directors wanted a certain report which seemed not only impractical but of no use whatever. He was unable to bring himself into a frame of mind in which he could get it started. I offered to prepare the report, promising dual results. First, the report would positively and completely fulfill the request, and second, it would be so obviously impractical and useless that no subsequent report of that nature would be requested. That is exactly what happened. To have argued against preparing the report would have been disastrous. By using an indirect approach, the desire for the report was killed.

The aim of real business is the making of profits. From that premise, let us adopt one potent precept that no avoidable expenditure be incurred which will not result in an increase in net profits over that which would otherwise obtain.

It is axiomatic that no report can be issued without incurring an expenditure. Therefore, the first test that a report must meet is whether it serves to increase gross income or to decrease costs in proportion to the cost of the report itself. It may be recognized that too many reports are the rule rather than the exception. To have too many things of any sort inevitably results in a decline in the regard for any one of them. This is particularly true of reports. A favorite method of some authors is to quietly discontinue certain reports of doubtful value and

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[6] Barrett, J. H., "Observations on Reports for Management Use," *Annual Proceedings*, National Office Management Association, 1945 p. 121.

then to wait to see if they are missed. Frequently nothing is ever heard further about them.

No executive should have his time taken up in digging through a lot of figures when the essence of the story could be told in summary form. Eliminate the fluff and the Boss' respect for your good judgment will rise. It is far better to be ready to amplify the information on any point than it is to make the Boss dig for the meat of the kernel. A study of the mental processes of the Boss will soon tell you just how much detail should be put into a report to satisfy his particular taste. Sometimes the Boss prefers a tabulated summary, with supplemental schedules backing up individual items shown in the summary.

Choice of Units

Often a point can be made in a report by the use of per-unit figures rather than gross amounts. An expenditure of $10,000 may seem much larger than one stated as 1¢ per unit. On the other hand a similar expenditure may seem too large as $1 per unit. Another desirable application of this principle might be the showing of the number of additional sales units which would have to be sold to recover the expenditure of the $10,000.

To my mind, one of the most serious faults in report design is the very prevalent existence of distortion caused by double-exposure or hybrids.

One interesting example of the elimination of distortion, which also utilizes the idea of reducing costs to a per-unit basis, may be found in a study of the cost of the operation of a privately owned automobile. Many companies pay their employees, who drive their automobiles in company service, on the basis of a fixed amount per mile driven. If the employee finds that the mileage payment is high enough to make him a profit, he has the incentive to drive more miles in order to make more money. But the distortion produced by a fixed amount per mile is accentuated by the fact that even when the rate per mile is low, the employee is better off by driving more miles, unless, of course, the rate is too low. The difficulty arises from the fact that any statement of the cost of operating a passenger car in terms of cents per mile is a hybrid. There are two costs, not just one. The cost of ownership is distinct from that of operation and these two costs should never be combined. If you had owned one of the three popular standard cars during the period just before the war, and had driven it 10,000 miles a year, it would have cost you roughly five cents per mile, but if you had driven it 20,000 miles per year it would have cost you but three-and-a-half cents per mile. To get a true picture, the costs of ownership must be segregated, because such costs do not vary particularly with the mileage driven.

Be constantly on the alert for hybrids and distortions. They are so deadly because they tend to induce unwise decisions on the part of management. It is better to have no report at all than to have one which misleads the Boss into unwise actions.

Captions

A common defect in reports is the ambiguous language used in headings, captions and explanatory texts. It is astounding to find so many reports which are faulty in this respect. No matter how carefully the figures in a report may be prepared, no matter how free from hybrids, no matter how well arranged, the value of a report may be totally destroyed by the injudicious use of words. This is particularly true in the case of tabulations, which should be considered much as one should consider the wording of a telegram. The mental approach in drafting a telegram is to use as few words as possible, but to choose them deliberately to be sure that the full intent is unmistakable. The same approach should be made in designing a report for management use.

It is extremely difficult for any person to check his own work. We are all imbued with enough confidence in our own creations to be inclined to assume that we did the job right the first time. That is a peril which must be faced with determination. When the report has been completed, whether it be a new one or a new issue of an old one, hesitate long enough to give it a microscopic last look. Are you sure that it is a thoroughly competent picture of the message you want to convey?

Review of Reports

One of the prime principles which I have kept before me is that of challenging all methods, all procedures, and all reports which remain unchanged over any considerable period of time. The methods, procedures and reports of last year must be deficient in some respect. If we cannot do better now than we did last year, we are slipping backwards. Progress continues, and if we do not keep step with it, we are in an ebb tide. It is a great help to the author of a report to take a critical attitude toward his product in an attempt to improve it, lest he find himself in a rut. The chief difference between a rut and a grave is only its depth. Let's keep out of the ruts.

In summary, there are ten main points which an author should consider in making a report to management:

1. The author of a report to management must be as capable a salesman as the man who sells his company's product.
2. The report must be designed to satisfy the Boss' requirements for facts on which to base decisions and actions.
3. It must be tailor-made to fit the Boss' mental type.
4. It must pay its way.
5. The author should know the purpose for which the report is to be used.
6. Computations must be scrutinized for reasonableness of results.
7. The report must be as brief as possible.
8. Great care should be used to eliminate "double-exposures."

9. The language should be certain in interpretation, not only in explanatory texts but in column headings and captions.

10. Constant review must be made of the source and preparation of the figures used, and of the end-use of the report.

Conclusion. By way of conclusion, it might be worthwhile to list some of the factors that have been suggested as contributing to the development of effective and dynamic internal reports:

1. Determination of scope or content.
2. Elimination of unnecessary details.
3. Frequent check to determine if information is meeting the needs effectively.
4. Presentation of data in terms easily understood.
5. Frequent use of charts and graphs.
6. Discontinuance of unnecessary reports.

19

Office Costs and Budgets

and costs in the plant, at least, are getting the attention they deserve. Unless the office manager provides himself with adequate tools to measure and control costs, top management will either force him to do it or, worse yet, step in and do the job for him. In either case, continued neglect of this essential office function cannot fail to discredit the office manager and his profession.

Just prior to World War II the Cleveland Chapter of the National Office Management Association conducted a survey of a number of representative offices to discover what was being done in this field. Here is what was found: [1]

1. Those functions on which unit costs were kept were: transcribing cylinders, centralized typing, centralized filing, mimeographing, addressing of advertising, comptometer operation, making out payroll envelopes, key punch operation, billing machine operation, writing of accounts payable vouchers, order handling, duplicating forms, issuing invoices, issuing purchase orders, and writing collection letters. *But actually very few companies reporting were doing more than keeping costs on one or two of these operations.* They were keeping comparative records of production but not costs. In fact, most of the companies investigated simply do not keep unit costs.

2. Every company agreed that it would be well to have a fixed rule of procedure in ascertaining costs. They felt that the necessity of making a thorough and complete analysis of the factors involved was one reason so few accurate costs were kept.

3. When questioned on a logical starting place for compiling costs, stenographic work came first, report typing second, and any job carrying a great deal of volume was third. There was general agreement that the operation which takes the greatest amount of time should be costed first.

4. Only two large manufacturing companies reported that they used time study in determining unit costs.

5. All agreed that planning of the floor arrangement and its analysis on a cost basis was important but the majority did not devote a great deal of attention to it.

6. Everybody agreed that flow of work should be studied, but only one or two reported any actual steps along this line.

7. Fewer than 50 per cent of the companies which kept any costs took into consideration the cost of the office equipment and the interest and depreciation on it in determining the costs of a particular job.

8. Except for the same two large manufacturing plants mentioned above, not a single company reported using measured incentive plans.

9. Those companies which kept costs on certain operations compared

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[1] Harris, G. L., "The Control of Office Unit Costs," *Annual Proceedings*, National Office Management Association, June, 1939, p. 99.

them office by office but did not compare them with costs in other companies.

It is evident from the results obtained in the above survey that office management must focus its attention upon its own costs of operation if it is to retain the confidence and respect of top management.

Measuring the cost of office operations. The first step in measuring the cost of office operations is to determine a unit, or a number of units, of work for which costs can be secured. Thus in a wholesale house, for example, the cost per order handled may be used as the unit of calculation. A life insurance company may use the cost per policy issued; a university, the cost per student registered; a bank, the cost of handling each depositor's account. In every case, it will be observed, the fundamental principle is the same, namely, the selection of a unit of work and the calculation of a cost based on that unit.

In considering the cost of doing office work one must constantly bear in mind the fact that the office is a service department to the other departments of the company. In view of this, the problem of unit office costs resolves itself into a question of selecting a number of kinds of service that the office performs for the various departments and not only calculating the cost of each of these services in units of work performed, but also carrying this procedure to its logical conclusion by charging the other departments, at a given rate per unit, for the service. If, for example, a cost per letter or per line is established for the transcription work performed by a centralized stenographic department, the various departments using this service should be charged accordingly.

Organizing for cost control. Cost control and its normal complementary function, budgeting, must be built upon a firm foundation if they are to serve the intended purpose. It would be sheer waste of time, effort, and money to establish a cost system and adopt budgets if the functions which they are to control have not been standardized. How can one attempt to control costs and estimate expenses, if all the details of the work to be controlled are not standardized and the performance measured? The first step in cost control, then, is to examine the work being performed, analyze it, and simplify it. There is no point in setting standards on inefficiently performed jobs.

A program of office cost control. Mr. Fred T. Walker, of Procter & Gamble, outlines such a program in this manner: [2]

The first step should be the selection of an executive who will be assigned the responsibility of decreasing the cost of all paperwork wherever it occurs. If no concerted effort has been made to control this expense, the cost of such a man, and any help he needs, will pay off at the rate of two or three to one. This man's first assignment should be the taking of an inventory of all paperwork in the organization and evaluating the cost of performing this paperwork. He should know:

(1) What paperwork is being done and where;
(2) Who is doing it and when;
(3) How much time is being spent on it;
(4) Salaries of the employees doing it;
(5) How it is being done;
(6) Cost of purchased forms and forms printed or duplicated.

Before this inventory is begun, however, obtain the cooperation of all department heads, superintendents, and foremen. They must know the purpose of the program, concur with its aims and methods, and agree to assist the man selected to run it. One of the quickest ways to get this done is through meetings at which the whole program is thrashed out. These meetings should not stop at the top level of supervision but should filter on down to the level of work heads, chief clerks, etc. Get plenty of steam behind the program and keep interest and enthusiasm up. Set a goal for each department.

Once the program has been presented and accepted by all who are concerned, the paperwork inventory can be begun. Each department should be requested to gather all the paper forms which they use and prepare a written description, a form survey sheet, about the function of that form. An outline for this form survey sheet should probably list the following headings:

1. Form number, name and latest revision date.
2. History and purpose. How long the form has been in existence, what problem first gave rise to its necessity, and why the form is still necessary; i.e., to what practical use is it now being put?
3. Origin. The department, section, and employee creating the form.
4. Time. Length of time to accumulate information and prepare form.
5. Frequency. When and how often made up.
6. Copies, distribution, and routing. Number of copies made up, where each copy goes, what it is used for, and how long retained.
7. Data shown. A brief summary of the information shown on the form unless such is apparent from the form itself.

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[2] Walker, F. T., "A Program of Office Cost Control." *The Office*, September, 1945, p. 41.

forms and discourage any department from embarking on any questionable clerical activity.

The next step is to go after the 25 per cent to 35 per cent of clerical work which was not reflected in the study of the forms. Here the methods engineer must do a real detective job. He has three leads to work on:

1. "Source of data shown" on form survey sheets.
2. An inventory of constantly recurring information (in letter form) in various department files.
3. Interviews with all office workers to further trace the sources of information which they record on forms and in reports.

The third source will prove most fruitful. Information obtained from the clerks, stenographers, etc., in these interviews can also be worked into the form of job descriptions and used for job evaluation purposes.

Throughout the course of the program a careful estimate of the hours of time conserved through the elimination of non-essential work should be recorded and reported by department heads. Records of the number of workers in each department should also be maintained and followed up to insure that the office force is actually reduced in line with the hours conserved. It is entirely possible to allow the reduction in personnel to take place by moving surplus workers into jobs vacated through normal turnover, and it is recommended that within reasonable limits this method of making reductions be followed. The program will gain the increased acceptance and the cooperation not only of supervision but of the employees themselves if this is known. It would be well to bring out this point in the first meetings with supervision when the whole program is being talked over. Immediate and careful consideration should be given to salary reclassifications where changes in job duties occur. Here again employees will welcome the program if an opportunity is allowed them to earn more money because of increased job responsibilities.

One of the most important points in applying the above program is to know the progress at any stage. To do this the following points should be kept in mind.

1. Know at the beginning of the program just how much money is spent for paperwork.
2. Know in which, and how much in each department or activity this money is being spent.
3. Set a goal that can be reached. A 15 per cent to 20 per cent reduction in most cases will be possible.
4. Keep monthly progress reports in terms of
   (a) Ratio of cost of paperwork to plant production volume;
   (b) Hours conserved;
   (c) Office workers declared surplus;
   (d) Dollars saved;
   (e) Per cent of progress in each department toward your goal;

(f) Cost of operating methods engineer's staff;

(g) Hours of new or additional work absorbed by each department without increases in staff and also decreases in work volume.

(h) Office equipment conserved, i.e., typewriters, calculators, files, desks, chairs;

(i) Reduction in number of forms and money thus saved.

The above program will pass through two stages: (1) The discontinuance of non-essential or duplicated duties, responsibilities, and reports, and the subsequent absorption of slack or idle time by reassignment of duties in order to release personnel; (2) The simplification and streamlining of the remaining essential work with a second reassignment of duties to absorb slack time thus created. The second portion will pay off more slowly and will require the more detailed attention of your methods engineer to work out shortcuts and simplified methods.

Measuring production. After having analyzed and simplified the functions which remain after elimination of all non-essentials, the next step is to attempt the measurement of production of these functions. At the outset it should be understood that measurement of output is meaningless unless that output is compared with previously established standards. For example, a statement that the average typing output of a department is 175 lines per person per hour is meaningless until we know that a previously determined standard for that precise type of work has been set at 150 lines per hour.

The establishment of these standards and the measurement of the office work is a difficult, painstaking endeavor. Unless it is carefully planned and carried out, the results may be worthless. Assuming methods study has been applied to the jobs under consideration, the standards are then set—sometimes by means of time-study, sometimes on the basis of carefully evaluated experience—and the performance measured against the standard or yardstick.

Methods of United States Rubber Company. This company has made fine progress in the measurement and costing of office work. Since the following report was published, the work has advanced but the basic philosophy and the plan of procedure have not changed.[3]

In a manufacturing plant such as ours, the biggest problem is the variation in volume from week to week, month to month, and season to season. Consequently, we employ the use of more figures for control purposes than the average office. These variations are large enough

[3] Kaiser, H. M., "Measuring Office Output for Effective Control." *Office Management Series* No. 90, American Management Association, 1940, p 13.

	Orders Entered	%	Orders Billed	%	Accounts Payable Handled	%	Plant Production	%	Factory Employees	%	No. Man Days	%	Office Employees	%
1936 Standard														
February	5,755	100	6,969	100	6,913	100	765,787	100	4,138	100	93,912	100	474	100
19														
January	9,126	159	9,006	129	9,120	132	937,601	125	5,133	124	119,817	128	530	112
February	9,460	164	9,118	131	8,930	129	905,282	121	5,025	121	108,212	115	521	110
March	13,249	230	12,045	173	10,159	147	1,007,742	136	4,980	121	122,552	130	528	111
April	12,811	223	11,629	167	9,103	132	709,409	92	4,855	117	96,782	103	533	112
May	14,559	252	13,894	199	11,870	172	774,412	101	4,873	118	103,350	110	529	112
June	16,607	289	13,904	200	12,193	176	891,972	119	4,899	118	114,445	122	530	112
July	15,377	267	12,938	183	12,719	184	839,604	111	5,039	122	110,212	117	568	120
August	18,192	316	13,744	197	14,243	206	927,950	124	5,100	141	117,114	125	589	124
September	20,668	359	14,537	209	14,413	208	975,112	131	5,333	147	128,138	136	592	124
October	22,668	394	18,149	260	16,501	239	1,043,262	142	5,280	128	141,616	151	617	130
November	15,719	273	14,157	203	15,459	224	997,506	135	5,154	125	132,332	141	644	136
December	13,854	241	13,400	192	15,220	220	965,567	130	5,292	128	129,429	138	629	133

Fig. 56.—Factors Affecting Office Volume.

to necessitate additional personnel and cause changes in our layouts, if certain parts of our business expand or contract, or are reorganized. To indicate the amount of variation, a chart has been prepared of some of the basic facts affecting our office volume. (See Figure 56.)

The percentage of increase has varied sufficiently to warrant a close control over the items involved. The percent to the right of the unit is a comparison with a standard month in 1936, or, in other words, the variation from this standard month as 100 per cent indicates the increased volume from the standard considered, at the time, as an average working condition. This information is used in relating the number of personnel in a departmental office to the various indices, and as indictor points for basic information when additional office equipment is being purchased.

Units of Measurement

The units of measurement shown in Figure 57 are used where it is possible to obtain a count of the units handled. This chart also shows the unit used and the method of obtaining the unit. These units are self-explanatory with the exception of one or two. *Man-days* is a term used for the number of time tickets received daily. This unit is used because the number of days a department is working may vary out of relationship with the number of employees in the shop, due to a short-time operating schedule.

Department	Unit	How Obtained
Sales Department	Orders Received	Hand Count
Sales Department	Items on Order	Hand Count
Sales Department	Units Shipped	Calculator Tabulation
Order Entry & Billing	Orders Entered (by outlet)	Hand Count
Stenographic Department	Cyclometer Points	Mechanical Counter
Stenographic Department	Sheets Duplicated	Mechanical Counter
Filing Department	Pieces Filed	Measurement
Tabulating Department	Card Count	Measurement
Tabulating Department	Number of Hours Machine Operating	Chart
Accounts Receivable Dept.	Invoices	Mechanical Count
Comptometer Department	Tires Produced	Calculator Tabulations
Stores Accounting	Requisitions	Hand Count
Timekeeping & Payroll	Personnel on Payroll	Accumulative Records
Timekeeping & Payroll	Man-Days	Daily Accumulative Records

Fig. 57.—Units of Measurement of Office Work.

The number of hours tabulating equipment is in operation is recorded for use as a basis to determine the load on the machines and the depart-

ment. In some circumstances this information makes it possible to reduce equipment, or indicates the necessity for additional multipliers, sorters or printers.

We realize, of course, that these units are not constant in all cases. As for example, the Order Entry at one time of year may have fewer items per order than at another time, depending on the season. However, in general, the variation is not large enough to affect materially the number of personnel required, or the operating cost of the department per order.

Rarely have I found, and I am talking more about industrial organizations than those institutions where the volume varies to a lesser degree, a general usage of such units as those mentioned above. Many offices have forgotten the possibility of making a written daily report of the work completed the day before, the number of units uncompleted in the department, and the plans for bringing the work up to date for the current day.

On the other hand, some companies require that this information be made available to Management by nine o'clock in the morning, and if the condition warrants, a meeting is held with the supervisor concerned. If there are a number of interrelated departments—one depending on the other—under separate supervision, a meeting of all departments may be required. As a result of this meeting help may be transferred from a low point of activity to a peak point where additional help is required.

Uses of a Daily Report

An example of a daily report simplified is the number of dictaphone cylinders received during the day, the number transcribed and the number remaining. The uses for this type of report are many and may be varied according to the departments, the type of business and the trouble experienced in the past. Their first value seems to be enabling the supervisor regularly, at definite times, to review the entire situation in a department and make plans to eliminate conditions which are unsatisfactory.

Many times we have found, where such a report was considered necessary only until a condition was taken care of, that the supervisor became negligent. Consequently, trouble was experienced in meeting the schedule because of a lack of review. There seems to be a tendency among supervisors, if they are left alone, to use the system aviators call "flying by the seat of their pants," in managing their departments.

A further use for daily reports, such as the count on the number of invoices billed, is to make up a comparative monthly report, entered daily, of the number of invoices received in the department, the number completed and the number remaining in the department. This record will indicate whether the department is falling behind, or improving its situation in order to meet the closing date, as the month progresses.

The mere use of figures will not prevent trouble. However, their continued use, if the supervisor is alert, will have the tendency to preclude

unusual conditions. For example, the supervisor can look back to a certain time when 600 invoices were being produced per day by 15 employees in his department, or 40 invoices per operator. With a current load of 800 invoices per day, he knows he needs 20 operators, unless the work is to be allowed to fall behind schedule.

Another form we use records the number of order entries sent to the Shipping Room by quarter-hour intervals by outlet throughout the day. Its function is to indicate an even or uneven output of work from the department, besides showing the flow of work into the department. A record like this causes each department to work its orders on a more even basis, shifting clerical help from one operation to the next.

In addition to using unit reports to secure daily,-weekly and monthly controls, their use can be extended to a monthly cost sheet showing the total cost—by department—of salaries and wages, the cost per unit, and a comparison with the previous average for the year to date. (See Figure 58.)

In our company, we reduced unit costs in the Order Department from 25¢ per order to 15¢ per order. During this period of cost reduction, there was no change in methods; therefore the saving was accomplished only because of better management. The relationship between personnel and volume was followed more closely by supervision, and waiting periods were eliminated by obtaining a more uniform flow of orders through the department.

Through a cost report of this kind it is possible to make a check-up where new methods or procedures have been installed. I believe that, in the future, Management will not only demand and expect current cost information on office operations, but, if we are to keep the cost at a minimum, it will also require estimated costs of procedures and reports before they are adopted as a part of the operating routine.

We have, up to this time, considered only those departments where the type of work is specialized and where there are definite units of work which can be counted or measured. There are departments, however, where there are no such units available and where the establishment of units is not practical, yet the same need exists there and possibly a greater need than for the types of work mentioned.

Control in the Accounting Departments

The accounting functions in our plant are broken down into the following departments: General Accounting, Budget, Cost, Stores and Plant Accounting. Each of these departments has a special function, and because of the nature of rubber accounting, there is need for a department which performs and specializes on miscellaneous clerical duties previous to the final accounting operations.

This work has been centralized in a service department which can be referred to by any name, but which we happen to call our Comptometer Department. The work involves sorting, tabulating and comptometer operations, using peg board strips wherever possible. The department

is divided into two main divisions, one being the General Comptometer Group which takes work from each of the Accounting Departments. The other section is divided into groups assigned to the reporting of production, sales, assembling of miscellaneous distributions such as labor, accounts payable, material requisitions, and the preliminary assembling of manufacturing expense distributions.

In setting up this department we departed from standard organization practices for accounting departments. All clerical and machine work

ANALYSIS OF DEPARTMENTAL EXPENSE

Central Stenographic

	August,			Year to Date		
	Amount	Cyclometer Points	Unit Cost	Amount	Cyclometer Points	Unit Cost
Dictaphone	217.75	13,723	.0159	3,992.24	225,399	.0177
Stenographic	337.51	12,913	.0261	3,063.46	118,195	.0259
Typing	783.60	50,315	.0156	9,455.93	553,003	.0171
Total	1,338.86	76,951	.0174	16,511.63	896,597	.0184

Timekeeping and Payroll

	Amount	Per Man Day	Per Fact. Employee	Amount	Per Man Day	Per Fact. Employee
Timekeeping						
Salaries	3,210.83	.0271	.5794	26,753.73	.0267	.6216
Wages	851.71	.0072	.1536	6,886.78	.0069	.1608
Total	4,062.54	.0343	.7330	33,640.51	.0336	.7854
Comptometer						
Salaries	2,241.10	.0189	.4044	17,138.01	.0171	.4001
Wages	394.66	.0033	.0712	4,345.85	.0043	.1015
Total	2,635.76	.0222	.4756	21,483.86	.0214	.5016
Payroll						
Salaries	2,083.23	.0176	.3759	14,407.49	.0144	.3364
Wages	234.35	.0020	.0423	1,507.47	.0015	.0352
Total	2,317.58	.0196	.4182	15,914.96	.0159	.3716
Total Payroll Cost	9,015.88	.0761	1.6268	71,039.33	.0709	1.6586

Order Entry and Billing

	Amount	Unit Cost	Amount	Unit Cost
Order Entry				
Salaries	1,505.29	.0728	12,917.16	.0990
Wages	784.48	.0379	2,523.50	.0194
Total	2,289.77	.1107	15,440.66	.1184
No. of Orders Entered	20,678		130,451	
Billing				
Salaries	2,175.08	.1126	15,511.59	.1318
Wages	429.75	.0223	1,776.05	.0151
Total	2,604.83	.1349	17,287.64	.1469
No. of Invoices, etc.	19,315		177,677	

Fig. 58.—Analysis of Departmental Expense.

requiring a minimum of contact with accounting departments has been segregated. The accounting departments' supervision and personnel are specializing on their particular functions. This grouping together of a large clerical force under one department has resulted in a high degree of specialization, with the usual good results from improved personnel training, specialized skills, more uniform output per clerk and better supervision and planning.

Comptometer Department

DAILY HOUR ANALYSIS

Job No.	1	2	3	5	6	7	8	9	10	12	13	14	15	16	17	19	20	21	22	23	24	26	27	28	29	30	Total
Tabulation Section																											
200 Tire & Tube Shipments	41	44	22	24	24	14	17	43	10	12	32	24	15	19	0	37	22	27	25	16	26	39	34	18	20	18	623
400 Branch Billing	116	67	36	66	47	65	68	52	....	35	33	47	42	46	.	43	81	31	29	28	1	43	94	163	89	52	1,374
500 Production	94	108	26	17	19	21	35	17	15	28	28	24	22	33	15	19	28	25	24	27	16	39	35	23	27	35	800
700 Labor	54	56	79	82	83	88	59	46	....	64	60	59	55	55	....	35	65	68	60	59	0	83	45	33	63	93	1,444
General Comptometer																											
3101 Cost of Production	....	19	113	91	119	87	20	3	....	....	2	3	....	....	....	....	....	....	....	....	....	....	....	2	....	....	459
4208 Rubber & Cord Invty.	25	3	....	....	....	....	9	38	....	2	6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	83

19__ MONTHLY HOUR ANALYSIS

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Tabulation Section												
200 Tire & Tube Shipments	292	277	284	323	353	379	597	615	498	607	408	316
400 Branch Billing	1,365	1,146	804	814	838	863	1,232	1,371	854	1,249	1,124	1,324
500 Production	906	720	752	731	753	808	925	814	913	1,284	914	925
700 Labor	1,694	1,370	1,311	1,456	1,473	1,452	1,537	1,440	1,896	1,840	1,768	1,832
General Comptometer												
3101 Cost of Production	592	395	394	384	383	434	429	457	471	471	459	402
4208 Rubber & Cord Invty.	105	39	66	61	101	43	107	92	95	91	63	101

TOTAL DEPARTMENTAL HOURS

Clerical & Tabulating	8,800	7,200	6,600	7,500	7,100	7,000	8,300	8,400	7,800	9,700	8,100	8,600
General Comptometer	4,800	3,000	2,600	3,800	3,000	3,900	3,700	3,600	3,700	3,400	3,700	5,500
Total Department	13,600	10,200	9,200	11,300	10,100	10,900	12,000	12,000	11,500	13,100	11,800	14,100

Fig. 59.—Hour Analysis.

A quick indicator of volume variations helps to prevent a loose condition of excess clerical help. As we all know, if the loose condition continues, it is difficult to obtain the standard output per operator later when additional volume is thrown on the department. This is why we make rapid reductions in our personnel when volume decreases, and rapid increases when the condition is reversed.

Operators Graded

We find, too, that our supervisors in the Comptometer Department have eliminated a chronic office complaint—that of grading individuals. We grade our comptometer operators in three groups, Class 1, 2 and 3. Class 3 is a beginning operator, Class 2 a medium fast operator, and Class 1 is an operator having at least two or three years' experience plus general experience on the different types of work being done in the department.

Rate changes are based on the classification of the operator. Working on a beginner program as we are, it is necessary for us to follow the progress of each operator closely, as in six months one operator may equal the production of another operator who has been with us a year or more. This sometimes happens in spite of all the tests used to prevent the hiring of personnel not adapted to this type of work.

It is important to know the value of each employee to us and make our rate changes accordingly. Further, being aware of the variations in skill between operators enables us to keep the quality of personnel up to standard and to handle them more intelligently.

An example of an hour control follow-up was the installation of requisition distribution on a revised method. Our first month's work required 351 hours. With some refinements in the procedure, the number of hours needed dropped to 250 the following month, 215 hours in the third month, and at the present time we are doing this, with some variations in volume, in 108 to 150 hours per month. We find that, once hours are reduced on a given piece of work, the supervisor will strive to better these hours, knowing it is possible to repeat a previous reduction and bring new operators up to previous standards.

The Budget Department is mentioned as another example of the use of an hour control because of the difference in size between it and the Comptometer Department. The latter has seventy-five employees, as compared with nine in the Budget Department. Yet the value of the control to the supervision is the same in one as it is in the other.

Time Studies

Where the units of work are highly repetitive and the amount of work to be performed per unit is constant, time studies can be used for more accurate control and for incentive payment. Time studies have been used in our company for cost estimating purposes, determining of savings in the purchase of office equipment, control purposes and in some cases for incentive payment. The latter use has been limited, but in each case where incentive payment has been used, the success of the plan has been dependent on the accuracy of the information upon which the standards are based.

The use of reports enables us to measure the output of our various departments and unquestionably affects the output of each department and of each employee, with the result that the working morale is better than in an office without such controls. This result was not obtained by merely issuing a number of reports. Reports in themselves mean nothing unless the supervision and the personnel have been gradually taught their uses. This cannot be accomplished in a month or two. Good management in an office, like the management of any part of business, requires a nice balance between the various factors involved, which are personnel, salaries, supervision, management and company policies.

A job order cost system. Certain office operations lend themselves very readily to the application of job order costs. An example of this type of cost determination and control is the way in which the duplicating section of the office management division of a steel company handles this work.

A short time ago, the duplicating operations in this company were centralized under the control of the office manager. The services being rendered were analyzed and determined to be inadequate, and as a result obsolete equipment was replaced and the unit gradually undertook the task of providing certain duplicating services to the entire general office. At the outset, the policy was established that no work would be undertaken which could not be done more economically in the office than if it were sent outside. In order to adhere to this policy, a plan of costing was required. A job order cost system has proved to be successful.

The equipment of this section included several typewriters used for stencil cutting and copy typing, a Vari-Typer, a stencil duplicator, an office offset machine, an addressing machine, and a col-

lating machine. The work handled by this group includes the preparation and issuance of circular letters and bulletins, manual pages, office forms (new and revised), and a small amount of direct mail advertising performed primarily for the advertising department.

As soon as the group was organized, studies were made to make certain that the operators were trained in the proper performance of their jobs and that all possible simplifications in handling the work had been considered.

It was then decided to consider each job handled on the basis of four factors: first, composition; second, duplicating; third, addressing; and fourth, processing. Composition work includes straight typing, preparation of offset masters, preparation of stencils, and, when required, purchase of zinc photographic plates. The duplicating work covers all the operations involved in stencil and offset duplicating. The addressing factor includes the work necessary to address material, and the processing factor includes such operations as collating, stapling, padding forms, wrapping, etc.

A job ticket was devised (see Figure 60) so that all time spent on each of these four factors could be calculated separately. An automatic time recorder is used to clock in and out on each phase of the job. For example, should a two-page typing job come to the department and should it be decided to run this on the offset duplicator on a paper plate, the job instructions are written on the card and scheduled for the various operators. When the com-

	Off			Job No.	
	On	Description			
	Off		Masters ( ) @	cts. =	
	On	No. of Lines			
	Off	File Return Destroy			
	On		Hours @	/hr =	
	Off	Mimeo Offset Pages Copies ea.			
	On	Paper Spec.			
	Off	Back Up Hd. to Hd.	Sheets @	/C =	
	On	Tumble	Hours @	/hr =	
	Off	Addressograph Copy Envelopes to			
	On				
	Off				
	On		Hours @	/hr =	
	Off	Collate Staple Clip Mail			
	On	Pad Sheets			
	Off				
	On		Hours @	/hr =	
	Off	Deliver to Room No. Dept.			
	On	Ordered by Date Wanted			TOTAL

Fig. 60.—Job Ticket.

posing operator reaches the job, she clocks on the job and proceeds to type or Vari-Type the necessary masters. At the conclusion of her work on the job, she clocks out and inserts on the job ticket the amount of material she used, i.e., two or three masters.

The job is next passed to the offset operator, and, according to schedule, she picks it up, clocks in on the job, determines her paper specifications and the number of copies from the job ticket, and proceeds to run the work. She, in turn, enters on the job ticket the number of sheets she used in running the job and clocks out.

It is now necessary to collate page one and page two of this job, so it moves to the processing group, which, in turn, clocks in, performs the necessary collating function, and clocks out, and the job is completed.

At the end of each day, the supervisor collects the job tickets for all work finished and shipped and proceeds to cost the material and labor items. From a schedule she can determine the cost of the masters and extend that figure. According to a description of the paper she can determine the paper cost and extend that figure, and should any other material costs have been involved they also would be calculated. As far as labor is concerned, this is calculated by subtracting the time stamped at the left of the card from the entry immediately above it. The time recorder calculates in hundredths of an hour. The total time on the job may have been .68 hours. This is entered, multiplied by a standard rate, and extended to the right. This is done for all time accumulated on the job. The total of the material and labor costs is calculated and entered at the bottom right-hand corner.

Some explanation is necessary about the method of calculating labor cost. This firm works a seven and one-half hour day, and the labor rate is determined by assuming at the outset that only six hours of this day will be spent directly in jobs which can be costed. The remaining time includes personal time and the performance of duties necessary to the work of the department but which are actually burden. Some of these duties would be cutting new addressing plates, inking up and washing down the offset machine each day, checking of addressing lists, experimenting with new types of work prior to actual performance, and so on. Proofreading, incidentally, is charged as part of the composition factor.

The daily wage of each operator is calculated, and the total of these wages plus the entire salary of the supervisor is divided by the total of the productive hours of all the operators. This yields

Bonus Payment Plan

The work in our Central Transcribing Departments has offered a profitable and interesting opportunity for such a study. Centralization of this service was undertaken as early as 1924 in our Boston office, and subsequently extended to four large field offices. Relatively large volumes of similar types of work justified a detailed analysis of each operation. Methods, layout, and equipment were standardized. Job specifications were drawn up; and time standards were established for each operation. A bonus payment plan, based upon these time standards and standards of quality, was instituted first in Boston and later in the other large field offices.

Inasmuch as the work performed for various operating departments differed in respect to average number of lines per sheet, vocabulary requirements, quality of dictation, and so forth, a plan of rotating the work among operators according to the order of reception was put into effect. Work rotation, especially in the smaller units, has helped to develop flexibility of the working staff and higher standards of personnel capacity. Rotation has the added advantage of avoiding any appearance of favoritism and any chance that equally productive effort would be paid unfairly.

Under the bonus payment plan, time lost waiting for work is considered the responsibility of supervision and administration, and is therefore deducted from total working time before the computation of premium minutes, and so does not penalize individual operators.

The immediate effects of job definition, output measurement, and bonus payment were speedier completion of good quality work and a more efficient use of equipment and other items involving relatively fixed expense. This resulted in average linage cost reductions of approximately 25 per cent.

The bonus payment plan has had intangible, as well as measurable, advantages. Turnover of personnel in this service has been relatively small, pointing to the probability of employee satisfaction. The quality of the work by well-trained operators has been kept at a high level.

In addition to the foregoing advantages, measurement of output in lines presented an excellent basis for computing unit costs and measuring the relative efficiency of the different transcribing departments.

Computing Monthly Costs

Monthly average costs per line for each unit were calculated by dividing the total cost by the total number of lines typed. Since typing accounts for three-quarters of salary costs, or approximately 60 per cent of the total cost of the service, the line was the best available unit of measure. In this manner we obtained rough indices of departmental performance which required adjustments for factors beyond the control of supervisors or sectional office service administrators. Such factors as varying salary levels prevailing in different localities, varying rents, etc.,

had to be evaluated and discounted before arriving at final appraisals of efficiency.

Monthly unit costs for each transcribing department were averaged and then used as the basis of departmental charges for the service. Each month the number of lines produced for each "customer" department was multiplied by the predetermined unit cost to arrive at departmental charges. Questioning of charges by department heads has led to studies which have increased administrative knowledge of costs and ability to control service expenses.

Operators and supervisors are enabled to compare actual with standard performance each day by computing work in minutes relative to standard, from their daily work sheets. Special tables simplify these computations. This daily control enables the supervisor to correct promptly many high-cost-producing situations.

Each week summaries showing the performance of individual operators relative to standard are posted in each Central Transcribing Department, and have stimulated healthy interest among the personnel and probably have helped to provide non-financial as well as financial incentives to profitable work.

A weekly report showing departmental experience in lines produced per hour, substandard work, minutes of waiting time, absence, lines per sheet, and so forth, enables the general administrator of this service to control the Boston unit and to advise administrators in district offices regarding cost control. Monthly expense statements, which compare actual with predetermined unit costs, summarize relative departmental efficiency in rendering required service.

The employment of unit costs as symbols of managerial effectiveness has given life and meaning to the expense statements, and has contributed in no small degree to the development of central transcribing budgets.

4. The budget is then forwarded to the Home Office for review and approval.

The final approved budgets are then returned to the office service administrators, and provision is made for comparison of budgets with monthly and cumulative actual expenses on subsequent reports of departmental expense.

Comparisons of this type serve as guides to profitable analysis. The analysis and interpretation of discrepancies between budgeted and actual expenses discloses much information helpful to cost control. Furthermore, the recognition of favorable comparative cost showings of individual administrators provides powerful incentives to the continued progress of cost control.

Summary. Measuring clerical costs and budgeting office expenses are matters in which every progressive office manager should take an untiring and vital interest. In some cases, to be sure, particularly in smaller concerns, complete and detailed analyses of costs may not be needed. Whatever the situation may be, however, it is obvious that until the office manager is able to prove conclusively, by facts and figures, that his is an efficiently and economically conducted department, he is in a vulnerable position. Only after he has put his own house in order should he suggest the adoption of cost-reduction programs and the installation of better management methods elsewhere.

20

The Selection of Office Employees

It is almost trite to point out to the practical office manager and to the student of business the fact that at no time in the past twenty years or more has the matter of employer-employee relations been more important than it is today. The many activities usually referred to as personnel administration, which are carried on by business organizations, the growth in the strength of labor organizations, and the activities of the federal and state governments in the field of social security, all illustrate how important are the developments in this field.

Obviously it is not possible to cover here the whole field of industrial relations. The discussion therefore will be confined to those phases of personnel administration with which the office manager is usually concerned—namely, employee selection, employee training, compensation, and other personnel activities. Each of these four subjects is discussed in this and the three chapters which follow.

The Profession of Personnel Administration

It is well, at the outset, to dispel one source of confusion which may present itself to the executive who has looked into the literature of employee-employer relations or noted the practices of neighboring companies. "Industrial relations," "labor management," "personnel management," "personnel administration"—these and other terms have been used loosely and often interchangeably to describe that phase of management which is concerned with the most effective use of manpower. This diversity is merely a symptom of the "growing pains" of a relatively young profession, and the implied differences appear to reside primarily in the number and types of activities which have been organized on a formal basis.

The scope of industrial relations is considered by many to be more comprehensive than that of personnel administration, though the juncture at which the one assumes the proportions of the other is not sharply defined. The passage of the National Labor Relations Act, the impact

of miscellaneous labor legislation, and the more pronounced role of unions in employer-employee dealings are primarily responsible for a noticeable shift in emphasis to the broader meaning, particularly among the more sizeable companies.

For practical purposes, the terms "personnel administration" and "personnel department" have been adopted as most representative of current usage. However, in practice these designations do not constitute absolute criteria with respect to the nature of the programs they describe. Many "personnel or office managers" in both large and small companies spend a good part of their time sitting in on bargaining conferences, assisting in the settlement of grievances, and attending sessions devoted to planning and policy-making. Often, they find it necessary to delegate much of the responsibility for recruitment, training, placement, safety, and other personnel activities to members of their staffs. Such executives are, in effect, functioning as personnel relations managers. Again, other so-called "personnel directors" are primarily employment managers, performing few duties to warrant the former designation. It is evident, therefore, that the individual company, in establishing an organization for dealing with human relations, must exercise sound judgment in determining the extent to which the project constitutes a full-fledged industrial relations program. This, in the last analysis, must be the guide to the appropriate designations for the various phases of the undertaking until such time as more precise definitions are formulated.

Nature of the personnel function. A rather definitive statement of the nature of the personnel function is embodied in the blueprints of the reorganized and enlarged program of centralized control of personnel activities in a large company. This reads in part:

"The personnel function is all-pervasive throughout our organization. It cannot be relegated exclusively to a specific department in the same sense that manufacturing is the specific function of the Manufacturing Department. The policies we adopt with respect to personnel must represent a consolidation of the aims of the top executives, the individual department heads, the supervisors down the line, and our employees in the ranks. At all times, the more long-range requirements which present themselves to the personnel executive as a result of his research and close intimacy with various phases of human relations must be taken into active consideration. Our personnel manager and the members of his staff assist in the formulation and coordination of policies and procedures and facilitate their application through continuous consultation with operating personnel and through the provision of expert advice and specialized assistance."

From the foregoing, it is evident that the personnel department is not an operating unit, except within its own confines. Rather, it maintains a staff relationship with the other departments of the organization, and its success is largely dependent on the coöperation and active collaboration which it receives. Such coöperation stems from a sympathetic understanding of the role of such a department. Top management sets the pace in this respect. If it adopts a clear-cut personnel policy which

is eminently fair to all concerned, if it is sincere in its endorsement of the contemplated program, if it has selected a high-grade specialist to direct the work, and if it is prepared to accord him recognition in the form of definite status, responsibility and authority, the way is paved for organization-wide acceptance of the new project.

Today there is much tangible evidence of the personnel and office manager's enhanced position. For example, it is now accepted as best practice that he should report directly to the chief executive or other high-ranking official with company-wide rather than departmental jurisdiction. In some companies with particularly well-developed personnel and industrial relations departments, it is not uncommon for the individual directing the program to enjoy the rank of vice-president on a par with operating vice-presidents.

Activities of a personnel department. Companies follow various patterns in assigning personnel responsibilities. Therefore, the following outline of activities classified by Divisions can be considered chiefly as an inclusive guide which may differ in accordance with the basic conditions prevailing within each company:

1. *The Director of Personnel or the Office Manager may be charged with the following responsibilities:*
   a. To formulate policies of industrial relations in collaboration with executive officers, and to implement those policies.
   b. To see to it, in collaboration with the appropriate line personnel, that the company's personnel relations policies and practices are executed.
   c. To aid in the interpretation of management policies to employees, and of employees' points of view and attitudes to management, and, in collaboration with appropriate line and functional personnel, to interpret the company and the job to employees.
   d. To aid all who direct the work of others to become better personnel administrators.
   e. To establish and maintain contact with the labor union movement.
   f. To aid in all collective bargaining activities.
   g. To inform and to advise the management on matters affecting personnel relations.

Employment division

   a. New employment: develop sources—recruit—interview—check references—authorize physical examinations—clear papers.
   b. Tests: interest—aptitude—trade—other.
   c. Induction program.
   d. Changes in status: transfer—promotion—layoff—leave of absence—other.
   e. Salary and wage adjustments.
   f. Employee rating.
   g. Termination interviews.

h. Vocational guidance.
i. Personnel records and statistics.

3. *Medical division*
   a. Physical examinations: pre-employment—annual—special.
   b. Medical treatment and advice.
   c. First aid.
   d. Nursing service: investigation of absences—inspection of premises—home visits.
   e. Health education.
   f. Sanitation standards.
   g. Elimination of health hazards.
   h. Records and statistics.
4. *Safety division*
   a. Safety standards.
   b. Inspection of design, quality, and so forth, of equipment and materials for adherence to established standards of safety.
   c. Safety inspections.
   d. Elimination of safety hazards.
   e. Investigation and report of accidents.
   f. Promotion of safety committee work.
   g. Safety education: manuals—meetings—contests—other.
   h. Records and statistics.
5. *Training division*
   a. Training for production: job instruction—vestibule—other.
   b. Advanced training: instructor—supervisory—technical—executive.
   c. Preparation of training materials.
   d. General education: educational refund plan—library—company publications—other.
   e. Suggestion system.
   f. Coöperative relationships with outside training and educational agencies.
   g. Records and statistics.
6. *Benefits and services division*
   a. Group insurance: life—health—accident—compensation.
   b. Mutual benefit association.
   c. Hospitalization plan.
   d. Legal aid.
   e. Retirement plan.
   f. Thrift and savings plan.
   g. Dismissal compensation.
   h. Cafeteria.
   i. Recreational activities: social and athletic programs.
   j. Miscellaneous services.
   k. Records and statistics.
7. *Employee relations division*
   a. Participation in collective bargaining activities—interpretation of policy.

b. Grievance adjustment: participate in grievance procedure—follow up on all cases to insure that required steps have been taken.
c. Facilitate individual and group management-employee contacts.
d. Records and statistics.

8. *Personnel research division*
a. Studies on all phases of personnel and industrial relations—testing programs, safety, health, and so on.
b. Job analysis, evaluation and classification (on coöperative basis with other divisions and departments).
c. Preparation of manuals and forms.
d. Salary analysis.
e. Development of standard practices and procedures.
f. Personnel relations audit.
g. Maintain records of, and report to management on: cost of living—market rates of wages and salaries—wage and salary plans, vacation plans, and so on, of other companies.
h. Coöperation with all divisions on research and statistical activities.
i. Miscellaneous research and compilation of statistics.

and specific statement of the nature of the position and of the personal qualifications and characteristics that one who probably would be successful in the position should have. Thus, such items as a detailed list of the duties of the position, educational requirements, age, sex, physical qualifications if any, starting salary, maximum salary, promotional opportunities, and other pertinent factors, which together comprise the main points of the job, are set down. One of the principal purposes of preparing job specifications is that the person interviewing applicants can have a definite standard by which to judge the ability of the various prospective employees.

Figure 61 illustrates a personnel requisition form used by a well-known company.

PERSONNEL REQUISITION

Forward original and duplicate to Personnel Department

DATE _____ REQUISITION NO _____

DEPARTMENT _____ LOCATION _____ SUPERVISOR _____

Date Wanted	No. Sets of Employees Required	JOB TITLE	Grade & No. of Spec. No.	Wage Rate or Salary Range	CHARGE CODE (Salary Employees only)

Addition ☐ Permanent ☐ Part Time ☐ Male ☐ EDUCATION

Replacement ☐ Temporary ☐ Full Time ☐ Female ☐ Grammar ☐ Commercial ☐

High ☐ Engineering ☐

If temporary for how long? _____ If part time what hours or days? _____ Age Limits Min _____ College ☐ Chemical ☐

Person Replaced (If replacement) _____ Max _____ Other _____

IF ADDITION TO FORCE, STATE REASONS _____

STATE DUTIES, ALSO ANY SPECIAL REQUIREMENTS _____

SIGNED _____ Department Head

APPROVALS

(FOR PERSONNEL DEPARTMENT USE)

Position Filled by	Starting Date	Starting Rate	Employee notified by	REMARKS

Fig. 61.—Personnel Requisition.[2]

Preparing job analyses and specifications. Although it has come to be regarded chiefly as a tool for salary control and administration, job evaluation also is closely related to successful selection and training. The basis for sound evaluation is careful analysis of the components of the position. This same analysis can be translated into specifications for selection and training. To be effective, job analysis should be a continuing function. Since we shall discuss job analysis and job evaluation in relation to payment in later chapters, the following paragraphs and illustrations are in-

[2] "How to Establish and Maintain a Personnel Department," Research Report No. 4, American Management Association, 1944, p. 100

tended to indicate the manner in which the National Broadcasting Company obtains information through job analysis to be translated into job specifications and into the personnel requisition. The following procedure is used for the analysis of new positions:

1. When a department head wishes to establish a new position, he notifies the Job Analyst of the Personnel Department.
2. The Job Analyst makes an appointment with the department head, or with whomever he may designate, to discuss the duties of the new position. The Analyst records a description of the duties, at the same time checking the degree of various kinds of responsibility which the job entails, the amount of experience and education needed for the position, and so on.
3. The Job Analyst consolidates the information obtained in Step 2 and types it on a job description form (see Figures 62 and 63). This involves recording the duties of the position in terms of verbs of action.
4. The Analyst evaluates the position by assigning a point value to each factor analyzed and then determining in which classification the total point evaluation places the position. She also compares the position being evaluated with other positions in the department and in the company before setting a final classification and salary range for it.
5. The Personnel Director notifies the department head by memorandum of the classification and salary range of the new position.
6. Job descriptions are filed by salary ranges in individual department books. Each description is identified by a code number keyed to the salary book, which contains names, salary ranges, position title, and classification of all employees.
7. A completed copy of Form B (Figure 63) is forwarded to the Employment Office for use as a job specification in selecting the applicant requested by the department head through personnel requisition.

MENTAL AND VISUAL EFFORT

PHYSICAL EFFORT

WORKING CONDITIONS

CHANNELS OF PROMOTION

Jobs Below *Jobs Above*

Department *Company* *Department* *Company*

COMMENTS

Aptitudes and Skills Required:

Machines Operated:

Work Week:

Preferred Age:

Preferred Sex:

Desirable Personality Traits:

SUPERVISION RECEIVED

CONTACTS

EDUCATION

EXPERIENCE

TRAINING TIME

Fig 63.—Job Description (*Cont.*).

It can be seen that information on such factors provides those charged with the responsibility for selecting new employees with fundamental yardsticks for intelligent appraisal.

Sources of supply for office workers. Job specifications or their equivalent give the employment manager or interviewer the specific information he needs in order to seek and interview applicants. The first step, of course, is to secure applicants. Employment managers use several sources of supply for office workers.

Employment agencies. A very considerable number of companies make extensive use of employment agencies, especially in large cities where there are many agencies that specialize in providing office employees. While there are certain objections to employment agencies, especially from the employee's standpoint, the writer is of the opinion that the agency provides a convenient source of supply not readily obtainable otherwise. The employment agency is a useful clearing house to which employees wishing to secure a position may go and to which employers needing applicants may come. It may be that the agencies, especially the larger ones, cannot give a great amount of personal attention to each applicant

2. To detect the presence of remediable physical defects in order to enable the worker to correct them.
3. To determine the presence or absence of serious organic disease, either of which may have an important bearing on employment selection.
4. To prevent the spread of communicable disease by the exclusion of infected persons.

Advantages.

1. Presents a favorable opportunity for health education.
2. Enables the early discovery of disease.
3. Makes possible the proper placement of the worker.
4. Helps to prevent or lessen the effects of epidemics.
5. Tends to reduce absenteeism, when used as a part of a health service.
6. Is a factor in lessening accident occurrence.
7. Reduces the possibility of unjust claims for injuries.
8. May increase efficiency and production through proper placements.
9. Provides a means for economic control of future medical expense.

Protection for the worker, the fellow workers, and the industry are the chief motives that should actuate the inauguration of pre-employment physical examinations. They should never be adopted solely with the idea of weeding out the unfit.

Efficiency tests. Efficiency or work sample tests are those given to a person trained in a given operation to see how well he can do it. Under this heading come typing and stenography, comptometer, billing-machine, and punch-card operations, and any other work for which mechanically trained people are hired. A sample of the work is given them to determine how well they do it. While tests of ability such as these have the merit of giving the applicant a practical job to do, it must be remembered that, from the applicant's standpoint particularly, tests given in this way may be somewhat unfair, in that the applicant, being desirous of securing the position and being especially anxious to make good on this trial, may become nervous and fail to do as well in the test as she could do under normal circumstances.

Mental alertness and aptitude tests. Such tests are an effort to determine ability in advance of training on the job. Traits tested by this group range from physical fitness and mental ability to temperamental suitableness. They are the tests by which a company attempts to avoid unprofitable training and unsatisfactory end results. In this connection it should be borne in mind that at least 90 per cent of all applicants are untrained for the particular jobs that they are to do.

Type of Item	Capacity Measured	Significance in Office Work
1. Arithmetical reasoning	Ability to solve elementary reasoning problems in arithmetic	Adequacy for elementary mathematical work and promise for advanced work
2. Business information	Interest in and acquaintance with business problems	Extent of knowledge of business information is likely related to interest in work
3. Simple calculation	Facility with simple arithmetic problems	Well-established arithmetical bonds promise accuracy in such work.
4. Checking and comparing, for errors	Ability to notice details	Inability to notice errors and omissions forecasts trouble
5. Classification	Judgment in simple business situations	Putting things where they logically, or by a learned system, belong
6. Copying	Handwriting	Consistency and legibility necessary
7. Following directions	Ability to follow rules or guides	Understanding and following directions essential
8. Filing, numbers and names	Locating appropriate groups	Speed and accuracy in adopting new group systems
9. Grammar	Command of English	Correct transcription
10. Motor speed	Muscular flexibility	Machine operation
11. Numerical judgment	Judgment in estimating	Number sense
12. Oral instructions	Oral memory	Pay attention to and follow directions
13. Problem solving	Practical ability	Understanding what to do in typical situations
14. Spelling	Command of English	Correct transcription
15. Substitution	Learning new habits	Speed and accuracy in adopting new combinations
16. Verbal tasks	Breadth of verbal interest	Level of verbal intelligence an index of promotability
17. Verifying	Strength of established habits	Speed and ease with which acquired information can be used is a promise of quick absorption of similar tasks
18. Vocabulary	Verbal facility	Level of command of English

Fig. 64.

The mental alertness test is nothing more nor less than a general intelligence test. It has been found to be of most value as an aid in initial selection. Such a test (without regard to the particular kind of clerical work involved) will aid materially in selecting the better candidates for employment. When given between the initial and the final interview, it helps eliminate many obviously unfit candidates and thus saves considerable time and expense. A mental alertness test seems to indicate better than any other type of test what is known as "general promotability," which is an indication of the probable job level to which the individual is likely to be promoted ultimately.

An aptitude test is one which will indicate (before specific training) the degree of success an individual probably would attain if he were given the requisite training. If it becomes desirable to promote a number of employees to clerical work consisting primarily of discussion and correspondence, an appropriate aptitude test would indicate which employees would have the greatest chance of success and which would be most likely to fail. The test scores, therefore, could be used in conjunction with other pertinent evidence in reaching some decision on which of the employees to promote.[3]

In its interesting report on "Experience with Employment Tests," the National Industrial Conference Board, Inc. has prepared a useful table which includes the types of items found in clerical tests in use and which gives some interpretation of the particular type of item and the function or functions that the test evaluates.[4]

Two examples of clerical tests. A popular condensed mental alertness test is the Wonderlic Personnel Test. It is a short-form mental ability or mental alertness test which was originally developed and used in a large financial organization. The instruction sheet which is reproduced in Figure 65 is indicative of its nature and make-up.

Another test form which is representative of many in use is the Minnesota Vocational Test for Clerical Workers. The instruction sheet is reproduced in Figure 66.

The whole subject of tests is a large and technical one. There is not enough space for an extended study of it in this book. An office manager who proposes to adopt such tests in his own organization should carefully consider the matter from every angle and should certainly fortify himself with the necessary knowledge re-

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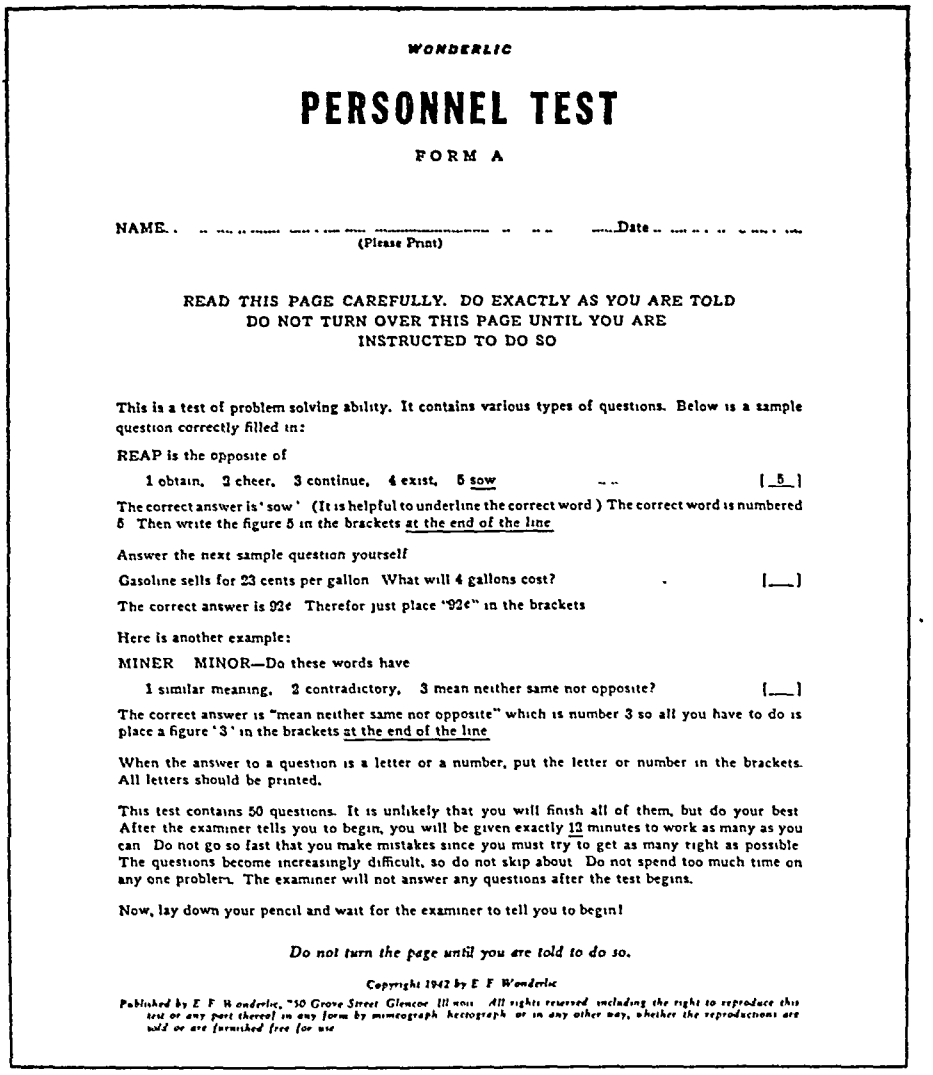
[3] Mitchell, J., Ferguson, L. W., Hull, R. L., *Office Organization and Personnel Problems*, O. M. Series No. 94, American Management Association, 1941.

[4] "Experience with Employment Tests," *Studies in Personnel Policy*. No 32. National Industrial Conference Board, Inc., 1941.

garding the principles of psychology and their application to tests of mental ability.



WONDERLIC

PERSONNEL TEST

FORM A

NAME. . . . . Date . . . . .
(Please Print)

READ THIS PAGE CAREFULLY. DO EXACTLY AS YOU ARE TOLD
DO NOT TURN OVER THIS PAGE UNTIL YOU ARE
INSTRUCTED TO DO SO

This is a test of problem solving ability. It contains various types of questions. Below is a sample question correctly filled in:

REAP is the opposite of

1 obtain, 2 cheer, 3 continue, 4 exist, 5 sow [5]

The correct answer is 'sow' (It is helpful to underline the correct word.) The correct word is numbered 5. Then write the figure 5 in the brackets at the end of the line.

Answer the next sample question yourself.

Gasoline sells for 23 cents per gallon. What will 4 gallons cost? [ ]

The correct answer is 92¢. Therefor just place "92¢" in the brackets.

Here is another example:

MINER MINOR—Do these words have

1 similar meaning, 2 contradictory, 3 mean neither same nor opposite? [ ]

The correct answer is "mean neither same nor opposite" which is number 3 so all you have to do is place a figure '3' in the brackets at the end of the line.

When the answer to a question is a letter or a number, put the letter or number in the brackets. All letters should be printed.

This test contains 50 questions. It is unlikely that you will finish all of them, but do your best. After the examiner tells you to begin, you will be given exactly 12 minutes to work as many as you can. Do not go so fast that you make mistakes since you must try to get as many right as possible. The questions become increasingly difficult, so do not skip about. Do not spend too much time on any one problem. The examiner will not answer any questions after the test begins.

Now, lay down your pencil and wait for the examiner to tell you to begin!

Do not turn the page until you are told to do so.

Copyright 1942 by E. F. Wonderlic

Published by E. F. Wonderlic, 140 Grove Street, Glencoe, Illinois. All rights reserved, including the right to reproduce this test or any part thereof, in any form by mimeograph, hectograph, or in any other way, whether the reproductions are sold or are furnished free for use.

Fig. 65.—Wonderlic Instruction Sheet.

Final selection. The final step in the usual employment procedure is the selection of the successful applicant. Only in a small number of cases does the employment manager, office manager, or interviewer make the final selection. The usual procedure is for the interviewer to make a preliminary selection from among all those who apply, but to leave the final selection to the executive in whose department the vacant position exists. Thus, if fifteen persons apply for a vacant position in the bookkeeping department, the interviewer may select four or five applicants who he thinks

are the best of the group and send these one by one to the head bookkeeper or chief accountant, who will interview the applicants again and make the final selection. In this way the department head is relieved of the routine work of interviewing a considerable number of persons, but at the same time he has an opportunity to make the final choice.

MINNESOTA VOCATIONAL TEST FOR CLERICAL WORKERS

(Arranged by Dorothy M Andrew under the direction of Donald G Paterson and Howard P. Longstaff)

Copyright 1933 The Psychological Corporation, 522 Fifth Avenue New York N Y

Name_____ Date_____

TEST 1—Number Comparison	TEST 2—Name Comparison
Number Right_____	Number Right_____
Number Wrong_____	Number Wrong_____
Score = R—W_____	Score = R—W_____
Percentile Rating_____	Percentile Rating_____

Instructions

On the inside pages there are two tests One of the tests consists of pairs of names and the other of pairs of numbers If the two names or the two numbers of a pair are *exactly the same* make a check mark (√) on the line between them, if they are *different*, make no mark on that line When the examiner says 'Stop' draw a line under the last pair at which you have looked

Samples done correctly of pairs of *Numbers*

79542		79524
5794367	√	5794367

Samples done correctly of pairs of *Names*

John C. Linder		John C. Lerder
Investors Syndicate	√	Investors Syndicate

Now try the samples below

66273894		66273984
527384578		527384578
New York World		New York World
Cargill Grain Co		Cargil Grain Co

This is a test for Speed and Accuracy Work as fast as you can without making mistakes

Do not turn this page until you are told to begin

Printed in U S A

Fig. 66.—Minnesota Instruction Sheet.

Employment records. The principal records that should be kept, in order that the office manager may have complete information regarding the personnel, are the following:

1. *Application blanks.* Everyone who applies for a position, regardless of whether he is employed, should be required to fill out an application blank. Considerable study has been given to the

question of exactly how much and what kind of information should be given by the applicant on the application blank. However, such points as name, address, business, and home telephone, married or single, salary expected, educational record, record of previous positions held, business and personal references, reasons for desiring to leave present or last position, and so on, are among the more usual questions asked. Application blanks or cards are usually filed alphabetically by the name of the applicant.

For those applicants whose qualifications are such that they may be considered for a position which may open to them in the future, it will be necessary to classify and cross index by occupations the application blanks which are retained and filed. Figure 67 shows an application blank which is designed to meet the general needs of most companies and which incorporates the specific requirements of the company concerned.

2. *Employee's personal history card.* The employee's personal history card is a fundamental and indispensable record of present employees. When a new employee is hired, the personal history record card is started. This card provides spaces for recording the progress of the employee during his period of employment. In addition to his personal history, such as name and address, which may be copied directly from the application blank, the card provides space for showing the name and number of the department to which the new employee is first assigned, the initial salary received, changes in departmental assignment and salary that may subsequently take place, date and reasons for leaving, and so on.

In addition, in cases where a company conducts employee-training classes, the personal history card should provide spaces for showing the kinds of courses the employee has taken, his grade or standing upon the completion of the course, and so on. Furthermore, in companies that sell stock to their employees under some kind of a stock-ownership plan, where thrift or saving plans are in force, where employees serve in social activities, or where a group insurance plan is in operation, the personal record card should provide spaces for recording this information. Figure 68 shows a complete employment-history record.

3. *Record of labor turnover.* Records of labor turnover, together with analysis of the reasons why employees leave, give the office manager the most useful and interesting sort of information regarding the effectiveness of present personnel policies, as well as the attitude of the employees toward the company as a whole and

PER 3A-2-

NATIONAL BROADCASTING COMPANY, INC.

FILE _____

APPLICATION FOR EMPLOYMENT

DATE 1-16

NAME Ross (LAST) Julia (FIRST) Ann (MIDDLE OR MARRIED WOMAN'S MAIDEN NAME) PHONE As9-0771

PRESENT ADDRESS 230 W. 10 CITY AND STATE New York, N.Y.

PERMANENT ADDRESS 230 W. 10 CITY AND STATE New York, N.Y.

IN CASE OF EMERGENCY NOTIFY Harold Ross

ADDRESS 230 W. 10 N.Y.C. PHONE NO As9-0771

DATE OF BIRTH Jan. (MONTH) 4 (DAY) 25 (YEAR) AGE 20 SEX F

HEIGHT 5'5" WEIGHT 105

SINGLE ✓ MARRIED ___ WIDOWED ___ DIVORCED ___ SEPARATED ___ NUMBER OF CHILDREN ___

LIST DEPENDENTS (WIFE, SON, ETC.) _____

NAME OF FATHER Harold Ross OCCUPATION Salesman

NAME OF MOTHER Mary Ross OCCUPATION Housewife

NAME OF HUSBAND OR WIFE _____ OCCUPATION _____

HAVE YOU WORKED FOR NBC BEFORE? No

ARE YOU RELATED TO ANYONE IN THE EMPLOY OF NBC? No

NAME AND RELATIONSHIP _____

KINDS OF WORK FOR WHICH QUALIFIED OR IN WHICH INTERESTED
Jr. Accounting

WHEN CAN YOU BEGIN WORK? 1-20 FOR WHAT PERIOD? indefinite

WHAT FOREIGN LANGUAGES DO YOU READ? French, Spanish

SPEAK? French WRITE? French

STENOGRAPHER? No SYSTEM _____ SPEED _____

ARE YOU A TOUCH TYPIST? Yes SPEED 40 w.p.m.

WHAT OFFICE APPLIANCES CAN YOU OPERATE?
Billing, Adding, Comptometer

EDUCATION

GIVE NAMES AND ADDRESSES — DATES (MONTH AND YEAR)

HIGH SCHOOL OR PRIVATE SCHOOL Hunter High School FROM 9-16 TO 6-8 GRADUATED? Yes COURSE OF STUDY General

ADDRESS 68 St. and Lexington Ave., N.Y.C.

COLLEGE OR UNIVERSITY Hunter College FROM 9-10 TO 6-1 DEGREE B.A. MAJOR Accounting

ADDRESS 620 Park Ave., N.Y.C.

PROFESSIONAL OR TECHNICAL TRAINING _____ FROM ___ TO ___ DEGREE ___ SUBJECTS ___

ADDRESS _____

EXPERIENCE

FIRM (LIST MOST RECENT FIRST)	KIND OF BUSINESS	POSITION HELD	DATES FROM	DATES TO	SALARY (MO.) MIN	SALARY (MO.) MAX	PERSON TO WHOM YOU WERE RESPONSIBLE	REASON FOR LEAVING
NAME Marsh, Revell Co. ADDRESS 65 W. 24 St. N.Y.C.	Mail Order Co.	Assistant Bookkeeper	9-16	12-31	130	130	Mr. J. Cane	Reduction in Force
NAME R.B. Coons & Co. ADDRESS 120 W. 50 St. N.Y.C.	Retail	Salesclerk	7-1	9-15	120	120	Mrs. R. Fiske	Better Job
NAME Ruth Marks, Inc. ADDRESS 666 5th Ave., N.Y.C.	Wholesale Ladies Wear	Office Clerk	6-1	9-5	100	100	Mr. F. Bond	Returned to School
NAME _____ ADDRESS _____								

MAY WE REFER TO SCHOOLS AND EMPLOYERS LISTED ABOVE? Yes

(OVER)

Fig. 67a.—Application For Employment.

PLEASE STATE WITH DATES ANY CHRONIC OR ACUTE ILLNESSES OR OPERATIONS YOU HAVE HAD

PRESENT STATE OF HEALTH Excellent

DATE AND PURPOSE OF LAST PHYSICAL EXAM. 10-3 School Requirement

DID YOU PASS? yes

HAVE YOU SUSTAINED ANY INJURY INVOLVING WORKMEN'S COMPENSATION? No

IF SO GIVE PLACE AND DATE

ARE YOU AFFILIATED WITH ANY MILITARY ORGANIZATION (NATIONAL GUARD ARMY NAVY MARINE CORPS RESERVES ETC.) No

IF SO STATE WHICH ORGANIZATION GIVING RANK RATE OR TITLE

SELECTIVE SERVICE CLASSIFICATION _____ DATE GIVEN CLASSIFICATION _____

LOCAL ORDER NUMBER _____ LOCAL BOARD NUMBER _____

LOCAL BOARD ADDRESS _____

DO YOU HOLD A COMMERCIAL RADIO OPERATOR'S LICENSE? No

IN SCHOOL WHAT SUBJECTS DID YOU LIKE BEST? Accounting, Math, French, Psychology

IN WHAT SCHOOL ACTIVITIES DID YOU ENGAGE? Dean's Comm., Hostess Comm., House Plan

ARE YOU STUDYING NOW? No IF SO WHAT?

WHERE?

HAVE YOU ANY HOBBY TRAINING OR EXPERIENCE EITHER AMATEUR OR PROFESSIONAL PERTAINING TO RADIO? yes IF SO PLEASE EXPLAIN Member of School Radio Club

HAVE YOU HAD EXPERIENCE SUPERVISING THE WORK OF OTHERS? No IF SO EXPLAIN NUMBER AND THE KIND OF WORK

SHOW HERE YOUR NAME AND ACCOUNT NUMBER AS REGISTERED UNDER THE SOCIAL SECURITY ACT

NAME Julia Ann Ross (PRINT)

ACCOUNT NUMBER 117-18-3965 (PRINT)

I HEREBY AFFIRM THAT MY ANSWERS TO THE FOREGOING QUESTIONS ARE TRUE AND CORRECT AND THAT I HAVE NOT KNOWINGLY WITHHELD ANY FACT OR CIRCUMSTANCE WHICH WOULD IF DISCLOSED AFFECT MY APPLICATION UNFAVORABLY

Julia Ann Ross
SIGNATURE OF APPLICANT

Fig. 67b.—Application For Employment (*Cont.*).

PER 6 1M 12-45

NATIONAL BROADCASTING COMPANY, INC. — PERSONNEL RECORD — ACME 4100 T-0

DATE OF BIRTH 1-4-25 | SOCIAL SECURITY NO. 117-18-3965

EMPLOYMENT AND SALARY RECORD

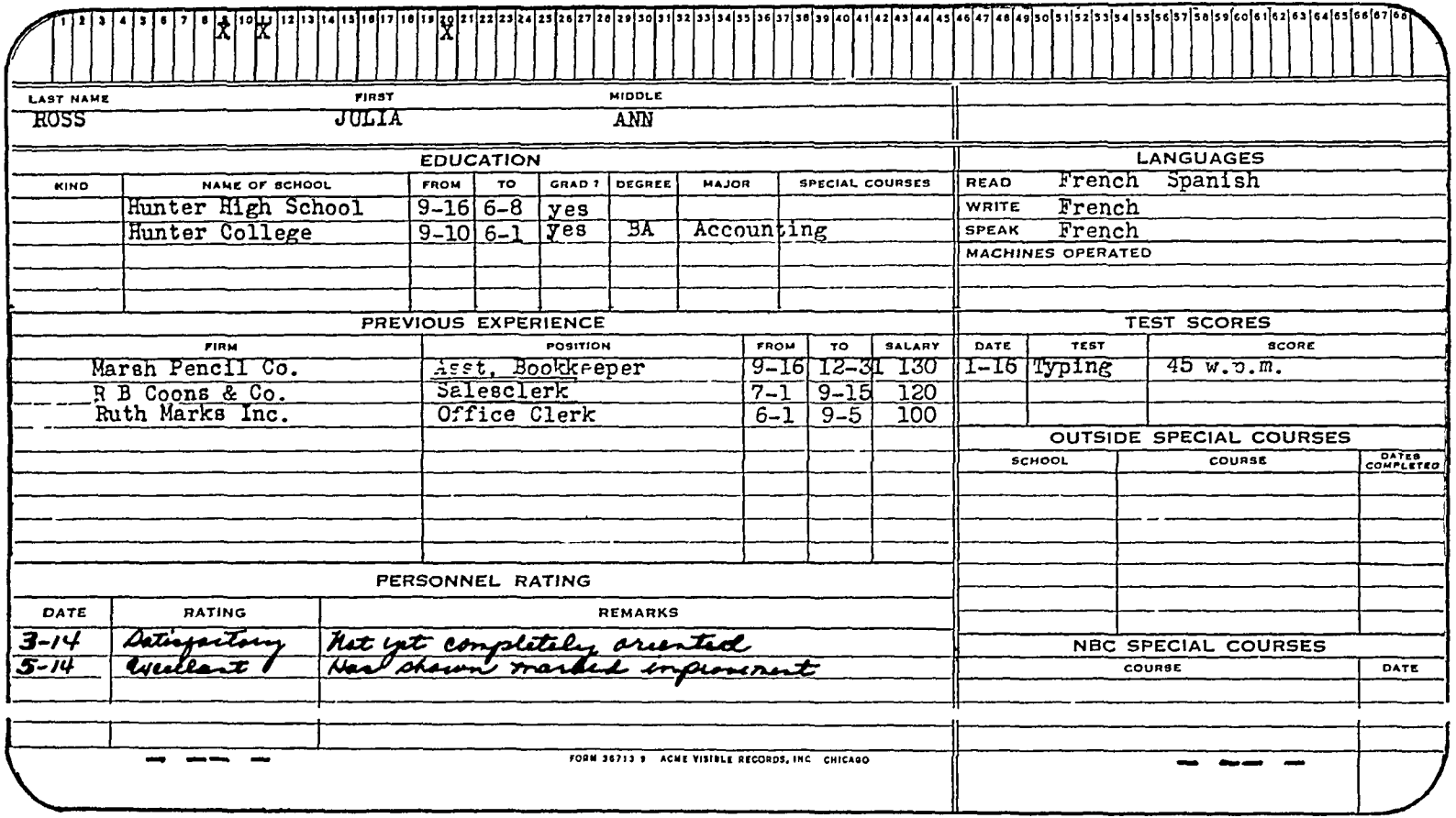
DATE	JOB CLASS	JOB TITLE	OFFICE	DEPARTMENT — DIVISION	SALARY	REPLACING	DATE AND REASON FOR TERMINATION OF EMPLOYMENT	
2-14	VI	Billing Clerk	N.Y.	Controllers — Disb.	130	Ruth Ray		
7-16	IX	Assistant Accountant	"	" "	140	B. Zolet		
10-16		Increase	"	" "	150			
2-1	XII	Senior Accountant	"	" "	175	K. Byrne		
8-1		Increase	"	" "	210			

SPECIAL DATA

DATE	
	RETIREMENT PLAN DATE EMPLOYED: 2-14
	PAST SERVICE CREDIT: —
	HOSPITALIZATION: enrolled
	GROUP INSURANCE: enrolled
	MEDICAL EXAMINATION: OK

P.U. DATE	LAST NAME	FIRST NAME	MIDDLE NAME	EXEMP.	NON EX.	10				I	H	UNION AFFILIATION	NBC STARTING DATE
	ROSS	JULIA	ANN		X					X	X		2-14

Fig. 68a.—Employment-History Record.



LAST NAME	FIRST	MIDDLE
ROSS	JULIA	ANN

EDUCATION

KIND	NAME OF SCHOOL	FROM	TO	GRAD ?	DEGREE	MAJOR	SPECIAL COURSES
	Hunter High School	9-16	6-8	yes			
	Hunter College	9-10	6-1	Yes	BA	Accounting	

LANGUAGES

READ	French Spanish
WRITE	French
SPEAK	French
MACHINES OPERATED	

PREVIOUS EXPERIENCE

FIRM	POSITION	FROM	TO	SALARY
Marsh Pencil Co.	Asst. Bookkeeper	9-16	12-31	130
R B Coons & Co.	Salesclerk	7-1	9-15	120
Ruth Marks Inc.	Office Clerk	6-1	9-5	100

TEST SCORES

DATE	TEST	SCORE
1-16	Typing	45 w.p.m.

OUTSIDE SPECIAL COURSES

SCHOOL	COURSE	DATES COMPLETED

PERSONNEL RATING

DATE	RATING	REMARKS
3-14	Satisfactory	Not yet completely oriented
5-14	Excellent	Has shown marked improvement

NBC SPECIAL COURSES

COURSE	DATE

FORM 36713 9 ACME VISIBLE RECORDS, INC CHICAGO

Fig. 68b.—Employment-History Record (*Cont.*).

toward the individual situations. Figures 69 and 70 illustrate such records.

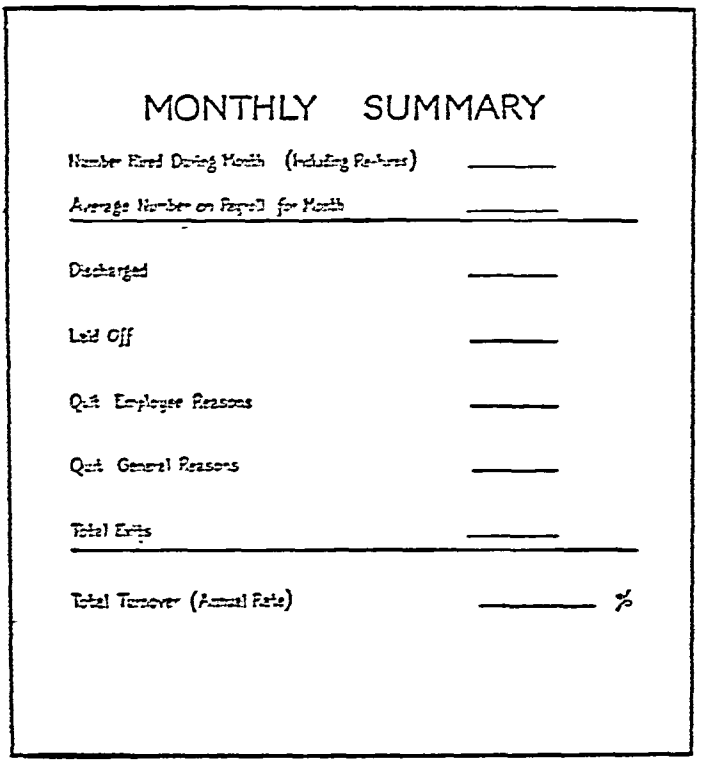


Fig. 69.—Record of Labor Turnover.

Office personnel records. No single text can hope to cover the combinations of forms which are in use or which might best fit the needs of any particular company. Only careful survey and determination of needs and requirements will enable the office manager to arrive at any conclusion as to those forms which will facilitate the program of personnel administration.

In many organizations the employment records, in addition to application blanks, employee's personal history card, and labor turnover record, may consist of all or several of the following types of records, some of which are used in accumulating data for such central records as those herein described:

a. Personnel requisition.
b. Source of applicant's record.
c. Job specification.
d. Preliminary application form.
e. Preliminary and final interview records.
f. Medical examination report.
g. Pre-employment test report.

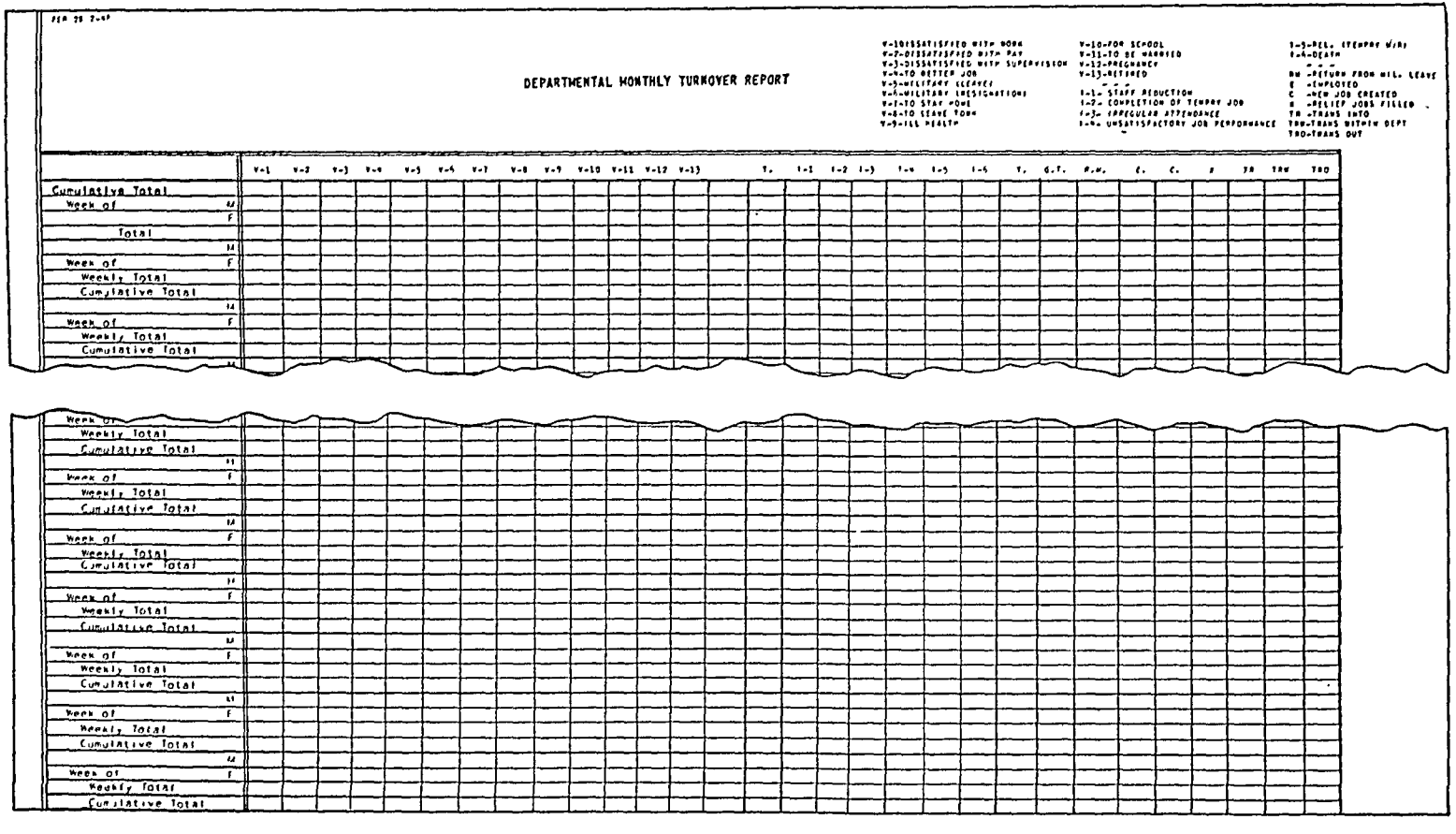


Fig. 70.—Monthly Turnover Report.

h. Bond application.
i. Reference inquiry and reply.
j. Employment notification.
k. Notice of change in status and/or salary.
l. Training record.
m. Periodic merit ratings.
n. Attendance and punctuality record.
o. Accident report.
p. Individual production records.
q. Termination form.
r. Suggestion record.

These forms and records exist in increasing frequency somewhat in ratio to the size of the company. The names by which these forms are designated also vary, but in general the designations are descriptive of their nature and purpose. Such records are not in themselves effective, but integrated purposefully into a program of personnel research and administration they can serve well and should be regarded as a dynamic tool.

21

Training and Promotion of Office Employees

The old-school point of view towards employee training was that employees should secure all their education in school and that no educational activities need be or should be carried on by the company itself beyond those that might be necessary to instruct the new employee in the details of his position. Indeed, some companies still follow this practice to a large extent.

Obviously such training is inevitably of the hit-or-miss kind. The new employee first spends a short time listening to the department head explain the work of the department. He is then given a desk and some work to do and told that the person next to him will answer any questions he may want to ask regarding the way in which the work is to be done. The result of such a haphazard plan is that the employee makes many unnecessary mistakes and acquires information regarding the duties of his position in a most unsystematic manner.

Today progressive firms realize that such methods are extremely wasteful. As a result, organized training for office employees is regarded as a fundamental and essential part of a well-balanced and thorough personnel program.

Advantages of training office employees. After the use of careful selection procedures at the time of the employee's entry into the company, it is no less important that steps be taken to offset what are very often recognized shortcomings in order that fullest efficiency and employee adjustment may be obtained. A policy of promotion from within the company has little meaning if no assistance is offered to the employee so that he may acquire the skills and information needed for advancement. Some feeling exists that worthy and ambitious employees will seek to advance and improve of their own accord. This is true in some instances,

but more often than not such efforts are spasmodic and only indirectly related to company needs.

Particularly in those companies with expressed promotion and transfer policies, formal classroom training courses have been developed to prepare employees for advancement. There has been a healthy trend towards development of planned on-the-job training as well. The trend in the direction of more training results from the fact that measurable advantages are to be found.

Training equips the employee with such skills as are necessary to do the job well. It therefore enables him to make up for lack of specific experience. It prevents deficiencies and so reduces expensive turnover.

Training well done produces greater efficiency and lowers salary expense. It results in higher quality and better service. Training can effectively cut down errors and uneconomical operating waste. It reduces turnover. For these reasons it can be a factor in improving morale and loyalty to the organization. Supervision can be reduced, and better adherence to and execution of company policies result.

The point can be made that the employee places a value on intelligent guidance and that training provides advantages for him. Where incentives are operative, a direct increase in earning power should come about. In other cases, indirect increases in earning power bring benefits. These may come through promotion or through greater flexibility and adaptability. When the employee knows his job, he feels greater security. The work tends to require less effort, and the employee gets greater satisfaction and interest through an understanding of requirements and abilities.

Types and methods of employee training. Induction procedures are often set apart from specifically designated training activities. However, the tangible result of a selection program is an influx of employees new to the company, all of whom must be oriented and trained.[1]

Induction procedures. Each of these men and women represents to the company a tremendous potential in good will, loyalty, and steady, skillful service. To each of these individuals, in turn, the company represents a potential of work satisfaction, pleasant associations, and fair treatment. The extent to which these potentials are realized by both

[1] "How to Establish and Maintain a Personnel Department," *Research Report* No. 4, American Management Association, 1944, p. 40.

will depend in good measure on the manner in which new recruits are introduced into the organization. Obviously, a well-balanced personnel program will not provide extensive controls over the quality of personnel hired and then leave to chance the reception accorded the newcomers, the information given them, and their progress on the job.

It is the duty of the personnel officer or office manager, therefore, to appraise the effectiveness of existing methods of orienting new employees and to introduce a sufficient amount of standardization into the process to insure that every individual receives uniform consideration. At the same time, the program must retain sufficient flexibility to allow for varied needs on different jobs in different parts of the organization.

A number of objectives have been posited for the induction program. Broadly, the intention is:

1. To encourage in the employee the feeling of "belonging" by extending him a courteous and friendly welcome.
2. To give the employee accurate information about the "policies which govern management and the practices which it endeavors to observe in its relations with its employees."
3. To teach the employee to perform the job to which he is assigned and to promote his understanding of his responsibilities and privileges in relation to the workplace.
4. To insure by systematic follow-up in the early stages of employment that the measures cited in (1), (2) and (3) above have operated to secure the desired adjustment in the worker to his work environment, and to the company as a whole.

Following is a summary outline of an induction program for new employees. Because it is really a composite of the programs of a number of companies, the outline is both general and comprehensive. The various items should be studied in the light of the induction needs of the individual company, as influenced by the character of the operations carried on, the nature of the employee groups involved, and other specific considerations. Only in this manner can the necessary modifications of procedure be determined.

Participation of the Personnel Department

A. Introductory information.

1. Company—history, development, organization, management, products—also the industry, if this is thought desirable.
2. Personnel policies—what the new employee can expect of the company and what the company expects of him.
3. Terms of employment and general rules and regulations.
4. Employee benefit plans, off-the-job activities, self-improvement opportunities.

(The above information may be presented in booklet form, or better still, booklets may be used to supplement verbal explanations.)

5. Company facilities.
6. Community facilities.

7. Job—general remarks about the department, its organization, personnel, type of work, hours, salaries and opportunities. Introduction to company or department executives.

B. Follow-up interview.

This may be left to departmental supervision but should, in any case, be included. It presents an opportunity to answer any questions on the employee's mind and to ascertain his reaction to the induction program. It may call for a repetition of some or all of the introductory information and may also include a tour about the offices.

Participation of the Line Organization

The following may be handled by line supervision or may be delegated to staff assistants or training supervisors:

A. Introductory information.

1. Introduction to departmental supervision.

If the information imparted by the employment department has all been given at one time, it will be desirable to repeat a great deal of information on the company, its policies, etc. This information may be given by higher departmental supervision.

2. Introduction to new employee's supervisor.
3. Departmental rules and regulations, tour of department.
4. Departmental facilities.
5. Job—duties, standards, hours, salaries, workplace, use and care of office machines, etc.
6. Introduction to fellow employees—the relation of their jobs to new employee's.

This may include assignment of new employee to sponsor with whom the new man may feel freer to talk and ask questions.

B. Follow-up interview.

May substitute for or supplement employment department follow-up and may be conducted by higher supervision or staff assistant.

1. Company history, development, products, policies, etc.
2. Employee benefit plans, etc.
3. Terms of employment.
4. Company and departmental rules and regulations, etc.
5. Job—duties, standards, etc.
6. Tour about the office.

It is evident from the foregoing that it would be difficult to define the precise points at which the induction program starts or ends. Likewise, the period of time over which the process extends—the so-called "spread" of the induction—cannot be delimited. In the fullest sense, the introduction to the job may be said to begin when the applicant presents himself for the initial interview and is given some facts about the work. Normally, it may be considered as finished when the employee has had sufficient time to digest the required information and to apply with a reasonable degree of success what has been learned.

Types and methods of employee training. Three principal kinds of employee training methods are commonly found:

First, there is training for new employees. Such work consists primarily of instructing the new employee specifically regarding the nature of the work to be done and the way in which it is to be done. Second, there is promotional training, which is designed to train present employees for the job ahead. Third, there is employee training of a more general nature, which is usually given to supervisory and executive forces.

There are various methods utilized in the training of clerical employees. One method which is named on the basis of its use in industrial training is vestibule training. Generally, this is off-the-job skill and information training involving factors that most nearly approximate those found on the job. The actual job duties are demonstrated and practiced under a planned program.

The conference method is frequently used to present portions of supervisory and executive training programs.

Lecture courses are the least desirable for training purposes but under certain circumstances, caused by subject matter or size of the employee group to be instructed, may be expedient.

In addition to the three principal kinds of training outlined above, a number of companies use other training devices such as coöperation with outside educational institutions, instruction manuals, house organs, and employees' papers. Training by the use of such methods, however, usually supplements the other more definitely organized methods already mentioned.

Points to be considered before starting employee training. Regardless of what kind of training is to be given or whether, as is sometimes the case, a company deems it advisable to give all three types, there are certain matters of policy and procedure that must be decided before a start can be made.

First, there is the question of attendance. Shall attendance by employees be voluntary or compulsory? Shall the classes be conducted on company time or on the employee's time? Voluntary attendance on the employee's time, or compulsory attendance on company time, comprise the usual combinations in use.

Second, there is the question as to the nature of the work to be given. Shall the content of the courses be general or specific? For example, a company may decide to give a course in business correspondence. It is apparent, however, that before the content

of the course can be planned, a decision must be made as to whether the material is to deal chiefly with the principles of business correspondence, or whether it is to be based largely on the correspondence problems of the particular company. Similarly, in planning a course in bookkeeping and accounting, a decision must be made as to whether the course shall consist largely of the theory of double-entry bookkeeping and accounting, or whether the various accounts and specific procedures of the company are to be used as a basis.

Third, there is a question of who shall give the course of instruction. Shall company executives conduct the work, or shall outsiders (frequently teachers in local educational institutions) be engaged for the work? In this connection it is worthwhile to remember that company executives may know the work of their respective departments exceptionally well but may not have the ability to explain it clearly to others. Moreover, there is always the question of whether the employees taking the course will not perhaps feel that the executive is assuming a good deal in the way of experience and knowledge when he attempts to "lecture" to others about it. On the other hand, no outside teacher, no matter how experienced or competent he may be, can possibly know the peculiar problems and details of the company's operation in the way that the executive knows them.

Fourth, there is the question of possible coöperation with existing educational institutions. In cases where classes in various business subjects are already being given by schools or colleges of recognized standing in the community, some companies do not attempt to duplicate such work for their own employees but merely make arrangements whereby employees may enroll in certain classes as special students, the company sometimes paying a share of the tuition fee.

Fifth, if a company establishes a number of employee training courses in different subjects, the content of each course must be carefully worked out. There must be no overlapping in subject matter; rather, it should be coördinated. For example, assume that a company is giving a course in stenography to typists, and that in the same organization a course in business correspondence is being conducted. The question immediately arises as to how much business English should be given in the stenographic class. This is especially likely to be a problem if all stenographers are urged to take the course in business English, in order that they

may be able to write better business letters, and also to qualify themselves for positions as private secretaries.

Training new employees for their initial work. The problem of training new employees for their initial work involves considerable study. Training, to be useful, must be a planned technique of imparting skills and useful knowledge to people.

The modern techniques still adhere to the tried formula of "tell the employee, show the employee, have the employee do the job or operation, and check him and correct him." However, in addition, it is now understood that the office worker should know the purpose of his assignments and their relationship to other work in the organization. Skillful supervision begins with skillful training and the new employee will perform much more effectively if steps are taken in his training to point out to him the relative importance of the several components of his job.

Another phase of training is based upon job methods. A course of training for the new employee should embrace instruction in the best arrangements of physical facilities for the performance of the work.

Industry has made extensive use of time and motion study, which is designed to determine the simplest and most economical manner of performing a given job. In training the new employee in the office, it is equally important that he be instructed in the use of the simplest and most effective motions and work flow. Similarly, the timing and rate of speed at which given motions or steps of the job are performed are important. If standards are determined, the training of the new employee for the attainment of effective speed is simplified.

Industrial training emphasizes the gains in elimination of spoilage and waste through training. Accuracy and the elimination of errors that are equally uneconomical in the office operation should be stressed as the final phase of training for the new employee. Instruction throughout should point out the need for accuracy and should indicate where such accuracy is essential.

Promotional training. The second principal type of training for office employees is promotional training. As the phrase indicates, it is designed to train present employees for the job ahead.

Various methods of promotional training are used. Courses in specific company procedure covering such activities as bookkeeping, order handling, and secretarial work may be made available to

present employees who are in beginners' positions, doing mail and messenger work and general clerical activities. More general courses in such subjects as business English, salesmanship, accounting, traffic management, and credits and collections may be given by the company or offered to employees in coöperation with established educational institutions.

One of the most frequently used methods of promotional training is the understudy plan, whereby selected individuals are placed in key positions as assistants to department heads and executives. The executive makes it his business to see that the assistant has full opportunity to learn all about his work. Periodic discussions may be held at which the executive explains the reasons why present procedures exist and why certain decisions were made in a particular way. After the assistant is thoroughly trained and experienced, he is promoted either to the position which he has been understudying or to another of equal importance in the company.

Employee training, Metropolitan Life Insurance Company. The Metropolitan Life Insurance Company is a leader in the field of job and promotional training for office employees. Because of this, in addition to the fact that the nature of its business is such that practically all employees, aside from the field force, are clerical workers, the methods of this company offer an excellent illustration of what may be included in a comprehensive training plan.

All training courses for office employees are given on the employees' time after office hours and without charge to the employees. Among the courses offered are the following:

Typing. Both group and individual instruction are given in touch typing.

Stenography. Special attention is paid to rapid and accurate transcription of notes, and special attention is given to proper punctuation, neatness, setup, and so on.

Dictaphone. Students are required to transcribe, on the typewriter, previously used cylinders. This training is given on the job with due consideration to spelling, punctuation, general neatness, and so on.

Business machines. Classes are held in calculating, key punch, and tabulating machine operation.

Principles and practices of life insurance. This class covers such subjects as tables of mortality, premiums, types of contracts, claim

settlements, group and industrial insurance, reserves and surrender values, selection of risks, treatment of sub-standard risks, the annual statement, investment of assets, internal organization, agency organization, insurance regulation and supervision, insurance laws, and history of insurance.

Business English, elementary. The elementary class is for those without previous formal training in business English. Particular attention is paid to grammar, syntax, and so on.

Business English, advanced. Admission to these classes is limited to those who have completed the elementary work, current enrollment being approximately 250. Emphasis is given to actual letter writing and composition.

Actuarial. For fifty years the company has maintained classes in mathematics and the actuarial science for the purpose of preparing students for the examinations given by the Actuarial Society of America and the American Institute of Actuaries. Identical examinations for the first eight groups of studies are given by both the Society and the Institute, and separate classes are conducted for the preparation for each of these examinations. Classes for Parts 1 to 4, inclusive, cover principally the mathematical processes.

Transfer and promotion. The principle of giving present employees the first opportunity to take positions involving larger responsibility and carrying a higher rate of pay than those which they are now holding is of course a well-established one. In order to put it into practice, however, it is necessary that there be available carefully worked out and detailed descriptions of every position in the form of job specifications, and that the records of the personnel be so arranged that the names of present employees who may be fitted for advancement may be readily available. It is also most important that a clear-cut distinction be made between a transfer and a promotion. The former word usually means merely a change from one position to another without an increase in the responsibility of the work and usually without an increase in pay. Promotion, on the other hand, means immediate advancement in responsibility and an immediate or subsequent increase in salary.

The so-called three-position plan of promotion represents the ideal method. Under it each employee—and executive—is not only doing his own work; at the same time he is both learning the job above him and training someone under him. In actual practice,

however, the adoption of such a plan obviously is not always possible. Furthermore, individual personalities necessarily play a most important part.

Further consideration will be given to the subject of transfer and promotion in connection with the discussion of salary standardization in Chapter 23.

Employee Training, Swift and Company [2]

What Swift does can often be done on a smaller, but wholly similar, scale by smaller companies. For example, Swift employs 120 employee-instructors. A much smaller company could perhaps employ one employee-instructor. Swift uses more than a dozen types of training programs, each designed for a specific purpose. Employees may take a four-year course, or a two-day course. The training program for Swift office boys has been in effect for more than twenty years. Messengers, file clerks, junior clerks may enroll for a four-year course, which takes the form of weekly, one-hour meetings throughout the year. The first two years they are taught general background, a sort of bird's eye view of Swift's setup. The third year they are instructed in Swift's buying and selling methods, and the fourth year they are taught packing house economics. In all, they receive 160 hours of instruction. Coupled with daily work experience, this training program turns out a high type executive in due time.

Executive and supervisory training. The selection and training of individuals who in time will be capable of holding important executive positions is a matter to which business organizations have given a great deal of attention, particularly in recent years. It is now recognized more clearly than ever that it is both unsafe and unwise to rely on the mere chance of being able to find a qualified executive when he is needed. Progressive concerns today, therefore, besides taking definite steps to locate potential executive personnel long before there is a definite position available, are giving special attention to the training which those thus chosen shall receive.

It is important in this connection to consider supervisory training and development as the keystone of any long-term executive training program. Supervisory skills have become largely those of human relations and those of getting results through the effective direction and coördination of the work of others.

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[2] *Industrial Relations Handbook,* edited by Aspley, J. C., and Whitmore, E., The Dartnell Corporation, Chicago & London, 1943, p. 312.

An interesting comment on this problem is provided by the following excerpt: [3]

So far as the exact content of supervisory training programs is concerned, there is considerable variation in subject matter and in the emphasis placed thereon. Any comprehensive program, however, should include consideration of these general areas:

Principles of organization: organization plan of the department concerned; the distinction between responsibilities and relationships of operating and staff departments.

Personnel administration: existing policies and their background; advance discussion of changes in policy; analysis and handling of complaints and grievances; and similar matters.

Cost control: proprietary viewpoint; purpose of accounts, analyses, records; budgetary control plan and procedure; types of expense and their control.

Quality control: principles of quality control.

Planning and scheduling: explanation of the whole system of planning and stabilization, from the top down, presented by those responsible.

The outstanding techniques employed to vitalize the supervisory training program are listed below. Companies have used them singly and in combination, and none of them is mutually exclusive:

1. Understudy method of on-the-job training, applied with adaptations to the various supervisory levels.
2. Conference method.
3. Modifications of the conference method, combining lectures, discussions, films, the case method of presentation, and other techniques.
4. Lecture method.
5. Reading assignments and distribution of pamphlets, manuals, policy bulletins, and other instructional material.
6. Field trips to other companies, and interdepartmental trips.
7. Membership in management associations and other professional groups, and attendance at periodic meetings and conferences sponsored by such groups.

Executive training plans. The importance of executive training and some of the methods used to select and train executives are outlined in the excerpt below.[4]

Executives do not spring forth full blown. Neither are their talents solely the product of some inherent maturation process, requiring no external stimulation. Experience is fast teaching the fallacy of providing extensive training for employee and supervisory groups, while neglecting to cultivate the aptitudes and to enhance the performance of those who

[3] Holden, P. E., Fish, L. S., and Smith, H. L., *Top-Management Organization and Control,* Stanford University Press, Stanford University, Calif., 1941, p. 113.

[4] "How to Establish and Maintain a Personnel Department," American Management Association, 1944, p. 64.

are guiding the destinies of enterprise. As one executive so aptly says: "Business can no longer wait for leaders to happen—it must make them happen."

The all-round development of present and potential executives must thus be an objective of every well-balanced training plan. True, persons of executive caliber are usually self-motivated to increase their stature and competence; they evolve their own techniques for promoting their knowledge of people and processes. In fact, a small company with a relatively limited executive staff may have to rely heavily on the individual initiative displayed by its top men in making themselves better administrators and encouraging the development of promising members of the organization who must ultimately succeed them. However, as the size of the establishment increases, and with it the number of persons who must function in executive capacity, the advantages of more systematized efforts in this area are self-evident.

Plans of executive training and education are as varied as are the requirements of the companies for which they are designed. However, examination of the contents of a number of programs reveals certain suggestive features all or many of which are included in the individual company plans.

1. Objective methods are employed to identify individuals within the organization who give evidence of the capacity to attain standards set for the executive personnel. Such persons are earmarked for advancement in accordance with the organization's "promotional sequence" arrangement.

2. Colleges, technical schools, and similar institutions are canvassed to find young people of executive "timber." Upon graduation, the most desirable of these candidates are employed and are launched on a prescribed course of development over an extended priod. This may involve a combination of on-the-job training in many or in all departments of the business, with classroom and other instruction.

3. For the continuous development of present executive personnel, regularly scheduled conferences are held to promote interchange of ideas, to discuss company policies and procedures, to consider industrial relations problems, etc.

4. Company schools offer carefully developed curricula for executive training to supplement the planned job experience, and coöperative arrangements are maintained with educational institutions whereby various types of related instruction are provided for the executive trainees.

5. Every senior executive has the responsibility of guiding the development of his understudy or subordinate executive. He delegates executive responsibilities of mounting complexity to this individual gradually, observes and evaluates the individual's performance, and gives counsel and constructive criticism.

6. All executives are encouraged or required to analyze their jobs so that they may better determine their particular strengths and weaknesses in relation to what is required of them and take steps to remedy any deficiencies in their personal equipment.

7. Company membership is maintained in professional management associations and reputable semi-private organizations which direct a flow of timely educational and technical reading matter to the executive group. Many such organizations hold periodic conferences, attended by executives from various parts of the country, at which information is shared and given. In addition, the librarian or some other member of the company personnel staff selects books, magazines, and other material for routing to executives.

22

Other Personnel Activities

The office manager, acting in his capacity of chief personnel officer, is usually either directly responsible for, or vitally interested in, a wide variety of other personnel activities, in addition to the selection and training of office employees. These include such matters as free time allowances on account of sickness, vacations, and absence for other reasons; the company library; employee publications; insurance; pension plans; financial aids such as loans, Christmas clubs, and savings funds; and other employee activities, including cafeterias, suggestion systems, length-of-service clubs, and athletic associations. Each of these matters is discussed briefly in this chapter.

Free time allowances. For obvious reasons, every company pays its office employees a certain amount for which it receives no service in return. Tardiness, illness, vacations, and absence for personal reasons normally amount to at least 5 per cent of the time for which an employee is paid during the year. If proper care is not taken, this figure may be as high as 7 or 8 per cent. Thus for a company with an annual office pay roll of $1,000,000, the loss because of lax methods may easily amount to as much as $25,000 or $30,000 a year. Viewed in this light, it is apparent that the establishment and administration of policies and rules covering free time allowances is no mere theoretical consideration but an important practical matter.

The National Industrial Conference Board conducted a survey among companies employing salaried office employees and found that of the more than two hundred companies reporting, while almost all had established definite policies, these varied with size, location and industry.[1]

[1] See National Industrial Conference Board Report on Personnel Practices in Factory and Offices, II, 1943.

Tardiness. Tardiness, particularly in reporting for work in the morning, is an ever-present problem in practically every office. The methods used for securing as high a percentage of "on time" arrivals as possible, however, vary widely.

In general it has been found that tardiness can be reduced by educational efforts. Penalties, such as docking, arouse resentment and do not always accomplish their purpose; offering a direct incentive for better attendance generally serves to improve attendance records; the choice of incentive depends to a large extent upon conditions peculiar to the individual employment situation.

The National Industrial Conference Board survey, taking cognizance of the tendency to establish positive practices which reward punctuality, found that of 284 reporting companies only 16 granted special awards for punctuality.[2]

Time clocks.[3] The companies which employ large numbers of wage-earners are more inclined to require clerical employees to punch time clocks than is the case among firms whose primary function is some type of office work. Among companies in professional service fields—insurance, advertising, management consultation—only 15 per cent use time clock records for clerical employees; among printing and hardware manufacturers the percentage rises to 80. This fact holds good whether companies are considered in relation to the size or the location of the community in which they are doing business.

In the entire group of contributors to this report, approximately two-fifths use time clocks for clerical workers. No doubt a factor which has had an effect on the situation is the general dislike of office personnel for this device. Those industrial relations workers who believe that the salaried employee's approach to employment is fundamentally different from that of the factory worker invariably mention this attitude as one of the distinguishing characteristics between the two groups.

Sickness. Practice varies widely with respect to the length of time for which an employee absent on account of sickness may be paid, either in full or in part. If there is a health insurance program in effect, which provides that an employee shall receive a stated amount after a given waiting period, usually at least two weeks, the company frequently pays the full salary for the first two weeks of illness, after which the employee is paid from the insurance fund.

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[2] National Industrial Conference Board Report on Personnel Practices in Factory and Offices, II, 1943.

[3] "Working Conditions in 222 Offices," Report No. 542, The Dartnell Corporation, Chicago, 1946.

To illustrate the lack of uniformity and the diversity of plans, the Sick Leave Table which tabulates the results for 227 companies reporting in the National Industrial Conference Board survey is reproduced in Figure 71.

In dealing with the problem of absence due to illness, the office manager needs to guard particularly against two situations that are not uncommon. The first is the case of the sickly employee whose intentions and ability are above reproach but whose health is precarious. The obvious thing for the office manager to do in such cases is to secure the advice of a physician and act accordingly. If the company maintains a full- or part-time doctor, the matter can usually be handled satisfactorily through him; if not, competent outside assistance should be secured. While the cases of such employees are often distressing, it is clear that no company can be expected to continue in its employ persons whose health will not permit them to work with reasonable regularity.

The second type of situation, which merits constant watchfulness, is the employee who feels that he is "entitled" to a minimum sick leave every year. Such cases should be dealt with diplomatically but firmly and can best be handled by making it clear to the employee that payment for absence on account of sickness is distinctly a privilege rather than a right. A number of companies handle all such situations very satisfactorily by the employment of a full- or part-time nurse who calls at the homes of employees within a few hours after they report being sick.

Vacations. A usual practice is to give a two-week vacation to all office employees who have been with the company for one year prior to the beginning of the vacation period. Often, employees with less than a year's service receive one day of paid vacation for each month of employment prior to the vacation period. Some firms are more liberal, granting full two-week vacations with pay to all those employed prior to January 1. Most companies specify the period during which vacation must be taken, often June 1 to September 30, but here again a number of companies allow employees to take their vacations whenever they wish to, provided a satisfactory working schedule can be arranged.

There has been a distinct trend towards greater liberality in the matter of vacations. Many companies now allow employees to begin their vacations at the close of business on Friday, even though the office may be open on Saturday during the vacation

Policy	Number of Companies, by Salaried Employees per Establishment					
	Total		Under 250	250 to 999	1,000 to 4,999	5,000 and Over
	No.	%				
Pay for absence if ill or injured	220	95.7	74	89	43	14
Do not pay for absence if ill or injured	3	1.3	2	1	..	..
Have no fixed rule	7	3.0	3	..	2	2
TOTAL	230	100.0	79	90	45	16
Maximum period for which regular salary is paid during absence						
Varies to length of service	63	27.8	21	21	16	5
3 days	1	0.4	..	..	1	..
5 days	1	0.4	..	1	..	..
1 week	11	4.9	1	4	5	1
10 days	2	0.9	..	..	1	1
12 days	1	0.4	1	..	..	..
2 weeks	24	10.6	8	12[a]	3	1
18 days	1	0.4	1	..	..	..
3 weeks	1	0.4	..	1	..	..
1 month	11	4.9	5	5[b]	1	..
6 weeks	1	0.4	1	..	..	..
2 months	4	1.8	1	2	..	1
3 months	3	1.3	1	2	..	..
6 months	6	2.6	3[c]	2[d]	1	..
No limit	19	8.4	5	10	3	1
Individual basis	37	16.3	11	10	10	6
No fixed rule	41	18.1	18	19	4	..
TOTAL	227	100.0	77	89	45	16
Minimum service requirements in order to receive full salary during sick leaves						
None	36	15.9	18	13	5	..
3 months	1	0.4	1	..	..	..
6 months	4	1.8	1	3	..	..
1 year	7	3.1	1	5	..	1
2 years	1	0.4	1	..	..	..
4 years	2	0.9	2	..	..	..
5 years	1	0.4	1	..	..	..
Individual basis	60	26.4	16	18	18	8
Not explained	40	17.6	11	20	7	2
Graduated plan	34	15.0	10	13	8	3
No fixed rule	41	18.1	15	17	7	2
TOTAL	227	100.0	77	89	45	16

[a] One company pays for an additional two weeks at half pay; one company pays for additional time on an individual basis.
[b] One company pays for an additional month at half pay.
[c] One company pays for an additional twelve months at half pay.
[d] One company pays difference between Group Health Insurance and regular pay during the period.

Fig. 71.—Sick Leave Table.

period, thus in effect granting an additional half-day's vacation. More and more companies, however, especially in the metropolitan centers such as New York and Chicago, are either closing their offices entirely on Saturdays during the summer or operating with only skeleton staffs. In these centers, too, there is a growing tendency towards the five-day week throughout the year. Many companies allow employees to take an extra week's vacation, or even more, at their own expense. In some cases length of service, or a perfect attendance and punctuality record, entitles an employee to a paid vacation longer than the average.

The scheduling of vacations is often the responsibility of the office manager. The usual practice is to have each department head or supervisor work out the schedule for his own department. The particular time when each individual will be away may be determined by seniority or more often informally by lot among the employees themselves, with, of course, the approval of the supervisor. It then becomes the office manager's task to coördinate all vacation schedules and to keep the paymaster or cashier advised so that the necessary arrangements can be made for paying each employee before he leaves.

The Dartnell Report on Working Conditions in 222 Offices summarizes the practices found in 1946.[4]

Vacation policies. Approximately three-quarters of the clerical workers in the reporting companies receive a two-week vacation with pay after one year's employment. A tendency may be noted, however, among the other companies to use the vacation as an incentive or punitive device.

In the companies using vacations as incentives the length of time given usually increases in relation to the length of time the worker has been with the company. Here is a sample schedule of this sort, used by the Krey Packing Company:

1 to 5 years' service	1 week
Over 5 years' service	2 weeks
Over 15 years' service, women	3 weeks
Over 20 years' service, men	3 weeks

These schedules usually provide for one-week vacations at the end of one year, rising to two weeks at the end of two, three, or five years with the company. One of the most liberal policies is that of Columbia

[4] "Working Conditions in 222 Offices," Report No. 542, The Dartnell Corporation, Chicago, 1946.

University, which gives its clerical workers two weeks after one year, three weeks after two years, and four weeks thereafter. Another company awards vacation time on the basis of one day for each six months of service with a one-week minimum.

Most companies give no vacation at all to employees who have been with them less than six months, and prorate vacation time for personnel who have been in their employ more than six months and less than a year. A day for a month is typical of the organizations which have two-week vacations. In a few cases the vacation time is included in a general total with sick-leave time. One such plan gives a total of two weeks' sick leave, not cumulative, and one week of extended disability time, both of which are subtracted from vacations if they are used.

Two companies reported that their vacation policies included a provision for extra time as a bonus for regular attendance during the year.

Other causes of absence. In addition to tardiness, illness, and vacation, there are a number of other reasons why employees may be absent.

Members of the National Guard must not only do a regular tour of duty annually, but are of course subject to emergency calls as well. The annual service period usually comes in the summer, so that Guard members may spend their vacations in this way. Comparatively few companies allow employees time off with pay for National Guard duty in addition to their regular vacations. On the other hand, absence on account of emergency service is usually paid for.

Employees are customarily paid for the time they are absent on account of jury duty.

Illness or death in the family, weddings, and other personal matters also necessitate occasional absence by office employees. Unless the case is an unusual one that makes it necessary for the employee to be away for a considerable length of time, or unless an employee makes an unreasonable number of requests, the usual practice is to accept such absences as unavoidable.

Overtime. It was general practice, prior to the enactment of the Fair Labor Standards Act (Wage and Hour Law), not to pay office employees for overtime work on the grounds that they received paid vacations and were not docked for various absences just discussed. It was felt that this and other benefits differentiated between the hourly worker and the salaried employee. However, the fact that the Wage and Hour Law embraces many office employees and that the hourly employee has gradually obtained many of the benefits which were solely those of the office employee have

brought about major changes in overtime practices for salaried employees.

Although a commentary on overtime practices follows, the author calls to the attention of the office manager the absolute necessity *for conformance to the requirements of the Federal and State Wage* and Hour Laws which obtain in the case of a particular company.

In 1945, the Commerce and Industry Association of New York, Inc. conducted a survey of clerical personnel practices. Two hundred and fifty-five companies were polled and the four tables in Figure 72 indicate the variances between practices.

OVERTIME PRACTICES

A. Over Schedule But Not Over 5 Hours Daily

Additional Compensation	All Combined	Mfg. Plant Offices	Mfg. Admin. Offices	Trade Wholesale	Trade Retail	Transport.	Utilities	Prof. & Fin.	Exp. & Inv.	Insurance	Misc.
None	56	11	13	4	3	1	2	7	3	2	2
Straight Time	14	4	2		2		2	3	1		
Time and One Half	17	3	3	4	2	2				1	2
Supper Money	11		1	2	1	1				1	4
Total Companies	104	18	21	10	5	4	4	6	4	4	14

B Over 5 Hours Daily

Additional Compensation	All Combined	Mfg. Plant Offices	Mfg. Admin. Offices	Trade Wholesale	Trade Retail	Transport.	Utilities	Prof. & Fin.	Exp. & Inv.	Insurance	Misc.
None	25	3	1	3	7	1	1		1		5
Straight Time	5	3	2		2			1			
Time and One Half	66	19	6	11	5	3	5	7	3		5
Supper Money	11	6	21	5	2	2	1	4	1	7	14
Total Companies	115	21	29	19	16	6	7	12	5	7	24

C. Over Schedule But Not Over 40 Hours Weekly

Additional Compensation	All Combined	Mfg. Plant Offices	Mfg. Admin. Offices	Trade Wholesale	Trade Retail	Transport.	Utilities	Prof. & Fin.	Exp. & Inv.	Insurance	Misc.
None	53	8	15	6	4	1	2	3	2	1	9
Straight Time	23	4	13	1	4	2	2	6	1	1	3
Time and One Half	14	4	2	1	2	2		1			1
Supper Money	25	5	5	3	3			3	3	2	6
Total Companies	121	22	35	11	11	7	4	11	4	4	19

D. Over 40 Hours Weekly

Additional Compensation	All Combined	Mfg. Plant Offices	Mfg. Admin. Offices	Trade Wholesale	Trade Retail	Transport.	Utilities	Prof. & Fin.	Exp. & Inv.	Insurance	Misc.
None	6			1	1		1		1		2
Straight Time	1			1							
Time and One Half	151	22	64	24	12	4	7	14	11	6	19
Supper Money	24	1	7		1	1		1		1	11
Total Companies	225	22	61	25	14	11	8	17	11	5	42

Fig. 72.—Overtime Practices.[5]

[5] *Annual Survey of Clerical Rates and Practices*, Commerce and Industry Association of N. Y., Inc.

In many cases, however, office employees receive supper money, provided they work a stated length of time, usually at least two hours and sometimes three, beyond the usual closing hour.

The supper money payment is intended merely to reimburse the employee for the out-of-pocket expense he incurs by reason of eating in a restaurant rather than at home. If the employee lives at home or boards, such a payment accomplishes its purpose, with perhaps something to spare. If, however, the employee customarily eats at restaurants, then the payment of supper money represents a real saving to him. Some companies, especially those that operate their own employee lunch rooms for noonday meals, provide an evening meal free and consequently pay no supper money in cash.

The office manager should give particular attention to overtime and to payments of supper money for two reasons. In the first place, an unreasonable amount of overtime, particularly if it is long continued, not only hurts morale but also is indicative of improper organization. A department, whose normal operations require the services of ten people should have ten employees who work, for the most part at least, regular hours and not eight persons most of whom customarily work overtime two or three nights a week. In the second place, the office manager should guard against a situation developing in which an employee purposely attempts to supplement his regular salary rather materially by supper money payments. Cases have come to the writer's attention in which employees have added as much as 15 to 20 per cent to regular earnings by overtime work, some of which, at least, proved upon investigation to be quite unnecessary.

The five-day week. The Dartnell Survey previously referred to showed an interesting trend regarding Saturday work: [6]

> The companies were divided about equally between those which require employees to work a half day on Saturdays and those which have adopted five 8-hour days as the work week. A definite relationship may be seen between the size of the community in which the company is located and its policy in this respect; in metropolitan areas of over a million population 71 per cent of the contributors close their offices on Saturday, while in the smallest towns only 55 per cent have such a policy. Equally definite is the relation between the area in which the company operates and the attitude toward a 5-day week. The East and South are approxi-

[6] "Working Conditions in 222 Offices," Report No. 542, The Dartnell Corporation, Chicago, 1946.

mately three-quarters committed to it, while only one quarter of the group in the West gives employees Saturdays off.

In general the question of Saturday work is not related to the type of business in which the company is engaged. Not unnaturally, however, it is organizations of the types which have direct personal relations with customers which most often offer the inducement of remaining open on Saturdays. Reporting banks, for example, were unanimous in requiring a 5½-day work week, and three-fourths of the retailers surveyed had the same system.

The use of Saturday work as a penalty for tardiness or absence was reported by a few companies, and several are using staggered systems of one sort or another. Under such arrangements, employees may work one Saturday a month, or every other week, to keep office open on a skeleton staff basis.

It seems a safe prediction that the trend toward abandoning Saturday work will continue, both for its effect upon morale and for the reduction in operating costs which it produces. Studies of the relationship of productivity to length of the working day have shown that unit output suffers as much from too short a work period as from too long sustaining effort. Office managers in companies with provision for a 5½-day week will usually admit that "not much gets done on Saturdays anyway." There is no question about the morale value of the 5-day week; employers in critical areas during the war found this a valuable inducement in hiring new personnel.

Although it has been pointed out that Wage and Hour Laws must be the determining factor, the office manager, for morale reasons, will find it helpful to keep informed on area and community practices. The Dartnell Report contributes the following on work-week practices: [7]

Work week. The 40-hour week is accepted almost unanimously as standard for clerical workers, according to the contributors to this report. A few companies work slightly longer, a few slightly shorter, periods, but the general pattern is built around the 40-hour system.

Of course, a wide variation is possible, and does occur, in the arrangement of the work week. There is a definite tendency, for instance, for the working day to start and end earlier the farther west the company may be; only one third of the eastern companies begin work at 8 a.m., while nearly two thirds of the west coast companies do so. More than a quarter of eastern organizations open their offices at 9 a.m., but only 5 per cent of the western companies start this late.

Earlier hours are also typical of smaller communities. Three companies in cities of under 10,000 population reported work days starting at 7 a.m., and more than half of this group is at work by 8 o'clock,

[7] "Working Conditions in 222 Offices," Report No. 542, The Dartnell Corporation, Chicago, 1946.

while not a single small-town company begins as late as 9. At the opposite extreme, nearly a quarter of the organizations in metropolitan areas begin work at 9, and two reported a work day beginning at 10.

National averages, however, are concentrated in two main groups—8 to 5 and 8:30 to 5. Nearly half of the reporting organizations use one of these periods as the work day. A great majority, too, begin and end the day on the hour or half-hour.

Lunch periods. In considering the work week it will be well if the company studies the matter of the time and length of lunch periods. Such periods now differ and most often fall between a half hour and one hour. There are isolated cases where either less than a half hour or more than one hour are granted. The lunch period should be governed by the nature of the work week, the nature of the work performed, the community eating facilities, and, of course, whether or not the company provides cafeteria service.

Rest or relief periods. One practice which has spread from the factory to the office is the assignment of morning and afternoon rest periods. Here again, such practice will be governed by the conditions found within a given company. Where the clerical work performed is of a monotonous nature, rest periods have proven effective in increasing the rate of productivity in the office and in reducing errors. Under certain circumstances, the granting of such periods which can be scheduled and controlled reduces unofficial rest periods taken by the employee. A good many companies have resolved the matter and assign ten- or fifteen-minute morning and afternoon rest periods for the office staffs.

The company library. Office management has found that not only direct training but steps which are generally aimed at improving the level of education and diversion for the employee are worthwhile in terms of improved employee relations and employee morale.

A company library can contribute to the knowledge of the employee and can be integrated into the employee services program. On the average, less than half of the companies employing office workers maintain their own employee or company libraries. However, the number is on the increase.

If a company has a well-organized research or statistical department, the company library is often an important part of it, and the librarian may report directly to the department manager. However, there are many cases in which the office manager is the responsible executive.

Company libraries almost always contain technical and semi-technical books and current periodicals having to do with the industry or line of business in which the company is engaged. In addition, many have a diversified assortment of general books on such subjects as history, travel, literature, and biography. Some have current popular magazines, and a few libraries have fiction. The total number of volumes may range from 5000 to 50,000; the annual operating cost, including book purchases, from $3000 to $20,000 or more; and the number of employees from one to as many as ten.

The Armstrong Cork Company maintains a circulating and reference library of about 5,000 books and periodicals with a librarian and assistant librarian in charge. The books consist largely of technical and biographical works and those on industrial relations subjects. Approximately 800 books and magazines are circulated each month.

Many companies like the Armstrong Cork Company have maintained libraries for many years. The method of organization and operation differs from company to company. In some instances the employees have been permitted to set up lending libraries run by themselves on a mutual and coöperative basis. This has been done where the number of employees is small.

In other large companies the organization and operation have been put under the charge of experienced librarians expressly employed for the purpose. Many large cities through their public libraries make it possible for companies to establish a branch in the company offices.

Employee information. There are many reasons why informing employees is an important phase of any employee relations program, but the basic purposes are to promote the best possible public relations and to achieve maximum efficiency at lowest cost.

No company today is sufficiently independent so that it can ignore the public relations factor. The employees of a company can easily be the heart of any public relations program. This is particularly true of local companies and of companies in smaller towns and cities where community relations and employee relations are almost one.

Most employees want to be proud of the organization for which they work. If they can be told what the aims and purpose of a company are and believe that these are worthwhile, they are only

too willing to pass their beliefs on to their friends, relatives, and all of the public with which they come in contact. Service organizations such as airlines, railroads, and express companies have long realized this and have done their best to "sell" the public through their employees. For public relations purposes it is important to let the employee know what you are trying to accomplish, why it is a useful goal, and what part he can play in it.

The second reason for informing employees is to achieve maximum efficiency at lowest cost. All of those things which contribute to good public relations are tied into good employee morale. As such, good morale brings about efficiency and low costs.

Employees usually want good leadership, recognition as individuals, and knowledge in advance about changes that will affect them. How well they are informed governs the degree to which these requirements are met.

The methods that can be used in informing employees are:

1. Supervisor's personal contacts with employees.
2. Staff interviews.
3. Group meetings.
4. Memoranda or letters.
5. Bulletin boards.
6. House organs (magazines or newspapers).
7. Employee manuals.
8. Annual or periodic reports to employees.
9. Public address systems.
10. Visual aids (slide film, motion pictures, posters).
11. Outside publicity (newspaper and magazine).

Supervisor's personal contacts with employees. The point at which management has fallen down most often is in its failure to stress the importance of the supervisor's function in informing employees. All of the other instruments for informing employees should be subordinated to the supervisor's responsibility for telling the employees all that they ought to know. As a matter of fact, the other devices are very often excuses for failure to provide the supervisor with the information he needs and, in turn, are excuses for his failure to inform employees. In a word, the key to an employee information program should be the supervisor. He should be well informed and should know what the other methods of informing employees are, when they are to be used, and what they are to say.

If this fundamental is recognized and accepted, the other devices

can be looked on as accessories and can be useful in strengthening an employee information program. Too often we inform groups of employees and forget the individual. The supervisory contacts are important since the supervisor works with the individual.

Staff interviews. One major function of the interviewer in any personnel organization should be to give information. Usually in the induction procedure previously outlined we find the use of a staff interview. At the least, the employee is informed in such an interview about pay, hours of work, benefits, and chances for advancement.

Group meetings. Most often the employee attends a group meeting as a part of an orientation or induction program. Here he may be told about getting to and from work, eating facilities, absences and latenesses, locker and washroom information, medical services, miscellaneous rules and regulations, place in the organization, and more about benefits and policies.

Memoranda or letters. The new employee may receive a letter of welcome from a company official or an informative memorandum which tells him specifically the terms and conditions under which he has been employed and which at the same time welcomes him. Some companies send such letters to the home as soon as the employee is signed up. The personalization of such letters is important. If they are to be sent, care should be taken in not overdoing the tone of them and in making certain that names and addresses are correct, since sloppiness can do more harm than good.

Bulletin boards. Many companies place bulletin boards so that it is necessary for the employee to pass them on going to his work place, to lunch, and on going home. Unfortunately, most companies use bulletin boards as isolated catch-alls. If they are to be used, attention should be given to their layout. They should be placed so that all employees must pass them, and they should be kept up to date and integrated into the over-all employee information plan. One company occasionally puts teaser items on the boards, such as bulletins announcing, for example, that if the employee will call or write in he will be allowed to order some special item. This keeps reader interest up, as does the calendar of company events which the employee learns to rely on as his guide to company activities.

House organs. In issuing such employee publications, it is important, to avoid achieving more harm than good, to conform to good editorial standards, to avoid over-editorializing, and yet to achieve good company relations by using news stories and by making

the house organ more than a gossip sheet. If it can be written by the employees, so much the better; but obviously it must be controlled by a proficient editor who can achieve desired ends through an employee staff. For example, skilled editors feel the best way to promote the security and benefits of a retirement plan is to run a well-handled, well-illustrated story of the happy lives of pensioners, with liberal use of testimonials. The employee generally wants a house organ of and for the employee.

Most large companies are resorting to the house organ as an effective means of informing employees. The primary purpose of the house organ is to build employee morale and foster better coöperation between the company and its employees. The best way to get coöperation in the office is to make each employee feel that he contributes to its success. The same rule, handled by a skillful editor, will work in editing the office publication. A message from the president has its place, but so has a message from the office boy. The function of the office house organ is to help stimulate a spirit of fellowship and coöperation, a realization of the common ends to be met by the organization as a group.

Employees' publications must be human if they are to be successful. Contents will vary with the business of the company; details of make-up, typography, and general features will follow largely the likes of the editor, but if the editor appreciates the importance (to himself) of each individual employee, and the importance to the company of welding the group into an harmonious whole by catering somewhat to their individual likes, the house organ can be a power for good beyond the dreams of its best wishers.

Readers' interest depends to a great extent on the physical appearance of the publication. It must present a clean-cut, business-like appearance, free from mechanical errors. Nothing kills interest more quickly than slovenliness in composition or printing. Poor cuts or paper, and typographical errors, will ruin the best of reading material. No matter how interesting the material is, an attractive and readable appearance is necessary. It is also well to bear in mind that house-organ readers are busy people. This fact has a direct bearing on the appearance of the publication, for if a businessman picks up a house organ that is large or thick, he generally lays it aside until he has more time.

Employee manual. Such manuals usually give the employee information on the history, aims and purpose, and organization of the company and of the working conditions, benefits, practices,

Determining amount of life insurance. Life insurance is payable for death for any cause. The amount of insurance may be determined in several ways. It may be based on salary classification, or it may be a flat sum for each employee.

Figure 74 shows that under the forty plans that graduate life insurance on the basis of employee compensation, the average plan provides a death benefit of approximately one year's pay. Under the ninety-four plans which grant the same amount of life insurance to all employees, nearly three-fourths provide a death benefit of $1,000.

Employee contributions. If the employee contributes to the cost of life insurance, the maximum employee contribution may not exceed 60 cents per $1,000 per month under the standard table and up to 80 cents per month if the industry is hazardous or there is a large proportion of Negroes in the group covered.

Termination of coverage. The insurance of any employee automatically terminates when his employment ends.

Group accident and sickness insurance. Group accident and sickness benefits perform a valuable function in industrial life today. They provide the worker with financial protection against the loss of income because of disability. According to insurance underwriting regulations, the eligible employee is entitled to disability benefits when he is incapable of performing his duties because of illness or non-occupational accident. The employee need not be confined to the house because of his disability but must be under the care of a physician.

The minimum number of employees which may be included in a group contract varies somewhat. In some group companies the minimum may be as low as twenty-five, but a more common practice is to require a minimum coverage of fifty lives, the same as for life insurance. If the plan requires employee contributions, at least 75 per cent of those eligible must participate. If the minimum coverage is less than fifty, an even higher percentage of participation is required, according to the regulations of some insurance companies.

Benefits. The maximum weekly benefit allowable by the group companies depends on the amount of insurance underwritten, or upon the number of lives covered, or upon the industry. The largest benefit that any insurance company will underwrite is $40 a week. If the employees are grouped by earnings classes, the benefit may not exceed a stipulated percentage of the compensation. For example, under the revised regulations of one insurance company the maximum benefit in any class may not exceed one-half of the maximum classification in the class, or three-fifths of the minimum in the class, whichever is less.

Nature of disability. Under group accident and sickness insurance, benefits are given for temporary or permanent total disability resulting from sickness or nonoccupational injury. Self-inflicted injuries are excluded from benefits. Insurance companies also exclude injuries received in connection with military or naval organizations in time of war or riot, or while performing police duty as a member of any military or naval organization.

two forms: (1) noncontributory plans, under which the employer pays all the premiums; and (2) contributory plans, under which the premiums are paid jointly by employer and employee. Under contributory plans the employer is responsible for the collection of employees' contributions.

Under the noncontributory type, all employees in the classes covered are automatically insured upon the effective date, or upon completion of the specified probationary period if actively at work on that date. If not at work, employees are usually not covered until their return to active employment, but in the case of group life this requirement is generally waived if the group covers more than 500 employees.

Under the contributory type, employees are not covered until they have signified their intention to join the group and have given the employer authority to deduct their share of the premiums from their earnings. Employees absent from work on the effective date of the policy or upon completion of their probationary period are not eligible to join until their return to active employment.

Miscellaneous provisions. Although permitted by law, medical examination of employees or other evidence of insurability is not required by insurance companies, except for employees who do not apply within the time limit set for applications under the contributory plan, or who elect to participate again after previous termination of insurance while remaining in the eligible classes. In no case may benefits for employees be paid to the employer.

The group policy is continued in force until its first anniversary and is renewed annually. If, however, on any premium due date the group covered is less than the number or percentage required by the insurance company, or the employees are paying a higher scale of premiums than stipulated in the contract, the insurance company may terminate the policy thirty days following written notice of termination.

These regulations apply to all forms of group insurance.

Group life insurance. Life insurance was the first of the group insurance benefits to be created, and early gained widespread acceptance by industry, for the need for some such protection was manifest.

AMOUNT OF LIFE INSURANCE UNDER UNIFORM AND GRADUATED BENEFIT PLANS

Amount of Life Insurance	Uniform Amount	Graduated on Basis of Employee's Annual Compensation							
		$1,040	$1,300	$1,560	$1,720	$2,080	$2,600	$3,120	$3,900
$ 500	12	10	4	2	2	1	..	..	..
1,000	69	27	22	16	8	4	2	2	2
1,500	5	..	8	11	6	6	4	3	3
2,000	5	2	6	10	18	18	9	4	3
2,500	..	..	..	..	1	3	8	6	5
3,000	..	..	..	1	1	5	13	14	10
3,500	..	..	..	..	..	..	..	1	1
4,000	..	..	..	..	1	1	1	5	4
5,000	..	..	..	..	..	1	3	3	10
Over $5,000	..	..	..	..	..	..	..	2	2
Miscellaneous	3	1	..	..	3	1	..	..	..
Number of plans	94	40	40	40	40	40	40	40	40

Fig. 74.

Determining amount of life insurance. Life insurance is payable for death for any cause. The amount of insurance may be determined in several ways. It may be based on salary classification, or it may be a flat sum for each employee.

Figure 74 shows that under the forty plans that graduate life insurance on the basis of employee compensation, the average plan provides a death benefit of approximately one year's pay. Under the ninety-four plans which grant the same amount of life insurance to all employees, nearly three-fourths provide a death benefit of $1,000.

Employee contributions. If the employee contributes to the cost of life insurance, the maximum employee contribution may not exceed 60 cents per $1,000 per month under the standard table and up to 80 cents per month if the industry is hazardous or there is a large proportion of Negroes in the group covered.

Termination of coverage. The insurance of any employee automatically terminates when his employment ends.

Group accident and sickness insurance. Group accident and sickness benefits perform a valuable function in industrial life today. They provide the worker with financial protection against the loss of income because of disability. According to insurance underwriting regulations, the eligible employee is entitled to disability benefits when he is incapable of performing his duties because of illness or non-occupational accident. The employee need not be confined to the house because of his disability but must be under the care of a physician.

The minimum number of employees which may be included in a group contract varies somewhat. In some group companies the minimum may be as low as twenty-five, but a more common practice is to require a minimum coverage of fifty lives, the same as for life insurance. If the plan requires employee contributions, at least 75 per cent of those eligible must participate. If the minimum coverage is less than fifty, an even higher percentage of participation is required, according to the regulations of some insurance companies.

Benefits. The maximum weekly benefit allowable by the group companies depends on the amount of insurance underwritten, or upon the number of lives covered, or upon the industry. The largest benefit that any insurance company will underwrite is $40 a week. If the employees are grouped by earnings classes, the benefit may not exceed a stipulated percentage of the compensation. For example, under the revised regulations of one insurance company the maximum benefit in any class may not exceed one-half of the maximum classification in the class, or three-fifths of the minimum in the class, whichever is less.

Nature of disability. Under group accident and sickness insurance, benefits are given for temporary or permanent total disability resulting from sickness or nonoccupational injury. Self-inflicted injuries are excluded from benefits. Insurance companies also exclude injuries received in connection with military or naval organizations in time of war or riot, or while performing police duty as a member of any military or naval organization.

Benefits may be given for pregnancy, but the maximum number of payments for this disability is limited to six weeks. Out of 149 plans providing disability benefits only eight exclude pregnancy benefits.

It will be observed from Figure 75 that in the majority of the plans with flat-sum payments the weekly benefit is either $10.00 or $10.50. The amounts under other uniform-benefit plans vary from $8 to $21 a week, with eighteen plans providing a benefit of $14 a week or more.

Under plans that graduate benefits on the basis of compensation, the employees are divided into earnings classes and, within specified income limits, receive the same benefits. The more earnings groups there are, the greater will be the possibility of providing the same proportion of compensation as benefits for all employees. With only two or three earnings groups, the ratio of benefits to compensation will be considerably higher for some employees than for others.

To arrive at some conclusion as to the relation of the disability benefits to compensation, the plans were analyzed to discover what benefits the employee would receive at specified wage levels. The results of this analysis are shown in Figure 75.

AMOUNT OF WEEKLY DISABILITY BENEFIT UNDER UNIFORM AND GRADUATED BENEFIT PLANS

Weekly Benefit	Uniform Benefit	Benefit Graduated on Basis of Earnings							
		Weekly Compensation							
		$20	$25	$30	$35	$40	$50	$70	$75
$ 7.00	..	2	1	..	..	..	..	..	..
8.00	2	..	..	..	..	..	..	..	..
10.00	19	22	8	2	..	..	..	..	..
10.50	14	13	4	..	..	..	..	..	..
12.00	4	4	3	3	3	2	2	2	2
14.00	5	10	10	13	10	5	5	5	5
15.00	9	10	21	15	10	6	4	3	2
17.50	..	..	3	11	11	4	2	2	2
18.00	..	..	2	4	4	..	..	..	..
20.00	2	..	..	10	14	10	7	5	3
21.00	2	..	..	2	8	13	7	5	4
24.00	..	..	..	..	1	3	3	1	..
25.00	..	..	..	..	4	10	15	9	5
28.00	..	..	..	..	..	2	6	3	1
30.00	..	..	..	..	..	2	5	2	1
35.00	..	..	..	..	..	..	3	14	15
40.00	..	..	..	..	..	..	..	7	11
Miscellaneous	2	4	4	2	1	1	2	3	4
Total companies	59	61	65	65	65	63	63	63	63

Fig. 75.

Hospital and surgical benefits.[10] A significant recent development in the field of insurance has been the tremendous growth of hospital benefit plans. Only ten years ago this type of insurance was practically nonexistent. By 1944 approximately six million persons, including employees and their dependents, were eligible for hospitalization benefits under group policies underwritten by leading insurance companies. The Blue

[10] Adapted from "Company Group Insurance Plans," National Industrial Conference Board, Inc., 1945.

Cross plans, under the sponsorship of nonprofit organizations in coöperation with local hospitals, cover about 17 million people. In all, approximately 23 million Americans are protected financially against hospital expenses, or about one out of every six persons.

Surgical benefits are provided for 4.3 million employees under 17,600 group insurance contracts.

Minimum coverage. The minimum coverage for group hospital and surgical benefits underwritten by most insurance companies is fifty lives, or 75 per cent of the eligible employees, whichever is greater. If benefits are available for dependents, at least 75 per cent of the eligible employees who have dependents must accept benefits for their dependents before the coverage becomes effective. An employee must be insured to subscribe for dependents' benefits.

Hospital benefits for employees. Three-fourths of the new group insurance plans studied contain provisions for hospital benefits. This part of the group insurance program is more uniform than most other forms of insurance coverage.

Room-and-board benefits. Upon confinement to a hospital, members of the plan are eligible for a specified amount of room-and-board benefits. The daily hospital benefit is an insured amount rather than a form of reimbursement and is paid regardless of the actual cost of the services. The minimum hospital benefit underwritten by insurance companies varies between $6 and $8, depending upon the regulations of the carrier.

It will be observed from Figure 76 that 85 per cent of the plans analyzed provide for a uniform, or flat-sum, benefit for all covered employees, regardless of their earnings, rank, or sex. This daily payment ranges from $3 to $6, with benefits of $4 or $5 a day appearing most frequently. In the remaining 15 per cent of the plans, hospital benefits are graduated on the basis of the employees' compensation. In isolated instances, the benefits are larger for executives than for the general employees or are higher for male than for female employees.

This discussion cannot cover all phases of group insurance. Medical reimbursement and special surgical benefits plans are available on a group basis. Competent assistance and recommendations can be obtained through qualified insurance companies.

Retirement Plans [11]

Once an employer decides that he wants to adopt a retirement plan he faces an almost infinite number of choices. He can effectively simplify his problem by making a series of basic decisions.

The first, and the one from which all others will of course flow, is a decision on what he wants his pension program to do.

Does he want to provide retirement benefits for all of his employees, or only for those making more than $3,000 a year whose above-$3,000 earnings are not counted under federal social security?

[11] "Industry Plans Pensions," *Business Week*, April 22, 1944.

Does he want the retirement age to be fixed or flexible?

What level of retirement compensation does he want or, conversely, how much is he prepared to spend?

Does he want the program to be financed by joint employer-employee contributions?

Is the income of his enterprise sufficiently stable to allow for regular, flat commitments, or does he want to build a pension fund out of profits and keep his contributions highly elastic?

The firm that adopts a canned program is courting trouble. Students of pension planning agree on few things beyond the fact that each com-

DAILY HOSPITAL BENEFITS FOR EMPLOYEES

Daily Hospital Benefits and Maximum Number of Daily Payments	Companies	
	Number	Per Cent of 141 Companies
Daily benefits		
Uniform		
$3.00	9	6.4
3.50	2	1.4
4.00	44	31.2
4.50	4	2.8
5.00	54	38.3
6.00	7	5.0
Total	120	85.1
Graduated		
$3.00 to $4.00	1	0.7
3.00 to 5.00	4	2.8
3.00 to 6.00	2	1.4
3.50 to 5.00	2	1.4
4.00 to 5.00	8	5.7
4.00 to 6.00	1	0.7
5.00 to 6.00	3	2.1
Total	21	14.9
Grand total	141	100.0
Maximum duration		
General disabilities		
31 days	122	86.5
70 days	19	13.5
Total	141	100.0
Pregnancy		
14 days	83	58.9
10 days	58	41.1
Total	141	100.0

Fig. 76.

pany presents a different problem because the factors which must be considered show up in differing relationships.

Help for pension planners. A natural tendency for the firm considering pension planning and thinking of it as a financial or insurance problem is to turn to a bank or an insurance company for assistance. Bank or insurance company representatives, usually with special training in pension problems, will, when called in, begin by discussing general pension theory so that the client gets a background in the subject.

Selecting a plan. The next step—in which the insurance company or bank representative, and the firm's attorneys together participate—is tentatively selecting a plan and drawing it up. It must then be checked and rechecked (by all those responsible) until a final draft, ready for submission to the stockholders, employees, and Bureau of Internal Revenue, is prepared.

Four broad choices. In the main, pension plans fall into four general classifications, depending on the way they are financed. They are: (1) the group annuity type; (2) the trusteed plan; (3) the individual policy trust program; and (4) some combination of these three basic forms.

Under a group annuity system, an insurance company enters into a master contract with the employer and provides employees (a minimum of fifty persons, and at least 75 per cent of the eligibles) with group pension coverage based on their earnings, age, and sex.

Under the trusteed plan (sometimes called self-administered), an employer creates an irrevocable trust and the trustees invest the accumulated funds in securities. The employee looks to the trust for his benefits, rather than to an insurance company. U. S. Government bonds are the commonest investment today.

The individual policy trust program is similar to the trusteed plan except that in this instance the trustee is instructed to invest the accumulated money with an insurance company in individual insurance policies. These policies on the life of each participant are of exactly the same type as the employee would buy as an individual from the insurance company, but they are owned and held by the trustee as long as the employee remains in the service of the company.

Combination systems. There are many combination forms which weave suitable features of each of these types into a general employee benefit plan.

Stock bonus or profit-sharing plans. These are sometimes designed to pay benefits in the form of retirement income. Under these schemes, a firm puts a certain amount of its profits into a fund (perhaps for the purchase of the company's common stock), and this money and its earnings are paid out to the employees in accordance with a plan previously announced.

When to retire. The usual age for retirement is 65, although women sometimes are retired at 60.

Determining benefits. The prevailing idea on the extent of benefits favors a level which will provide the retired employee from one-quarter to one-half of his average earnings, either exclusive or inclusive of social

To gain ideas that will directly benefit the company and its operations.
To improve management-worker relations and give both a whole new picture of cooperation.

In inviting the worker to make suggestions on that phase of the business with which he is most cognizant—primarily his own job and his surroundings on the job—you are in effect asking him to lend a hand in planning plant or store processes and procedures. And you are providing him with a channel so he can go right to the "topside" with his ideas.

The elements of an employee suggestion system are four:

1. Some way—for instance a suggestion box—to solicit and obtain ideas from employees in your organization.
2. Some way—usually through a committee of management and workers—to evaluate these ideas.
3. Some way to provide suitable recognition for ideas that are accepted and suitable explanations for those that are not.
4. Some way to follow up to see that good ideas are put to use, either immediately or whenever changing conditions make them applicable.

Other personnel activities of a financial nature. A problem common to all office organizations, and one with which the office and personnel manager must often deal personally, is the matter of requests by employees for temporary loans. Because every right-thinking businessman wants to do what he can to discourage loan sharks and others who prey on the misfortunes of respectable people, there is often a tendency to be rather lenient when such requests are made. On the other hand, experience shows clearly that unorganized lending of company funds may result in unwarranted losses.

In general, two methods of handling the employee loan problem are in use. One is to make such loans available to employees under a definite set of rules which apply in all cases. The primary requisites of such a plan are the determination of the need, a fixed maximum amount to be loaned, based in part perhaps on each employee's salary, and a definite arrangement for liquidation of the indebtedness over a given period of time. The other method, which has found increasing favor in recent years, is based on an arrangement between the company and a bank or responsible personal loan company under which employees may borrow money on their own notes without the necessity of securing other co-makers. In such cases the company does not guarantee the loan, but merely informs the bank that the applicant is a regular employee earning a certain salary.

A few companies coöperate with their employees in financing home purchases, especially in cases where the company is the principal business establishment in the community. Here the arrangement is usually quite similar to that which the borrower would ordinarily make with a bank or building and loan association.

Credit Unions [12]

Minor in character, but nonetheless genuine, are the financial emergencies confronting workers who wish to purchase automobiles, household appliances, and other durable consumer goods. The company credit union, operating under either a State or Federal charter, is a device by which such financing needs can be met inexpensively and without the dangers which occur in dealing with unscrupulous lenders.

A credit union is fundamentally an association of persons with some interest in common for the purpose of loaning one another money. People who are employed by the same company, belong to the same church, or live in the same area, may form a credit union. A member who is prosperous may deposit funds in the organization; members in need of help may make either unsecured or collateral loans, paying 1 per cent interest on the unpaid balance each month. The low interest rate resulting from the lack of administrative expense—funds are administered and loans approved by committees drawn from the membership—and the comparatively high return on savings, which on the average has been about 3 to 4 per cent, have made the credit union increasingly popular. The number of these associations in the United States nearly doubled between 1936 and 1940 from 5,437 to 9,150.

The present study is another indication of the growth of this movement. A 1935 survey showed that 11 per cent of the companies contributing had credit unions; in the group considered here, approximately one-third have them. If the smaller offices were omitted, the figure would be far higher; among airplane, farm equipment, and clothing manufacturers two-thirds have credit unions.

Other employee services. A number of companies make various other services available to their employees. Among these are lunch rooms and cafeterias; coöperative stores and other special purchasing arrangements, including discounts on goods made by the company; length-of-service clubs, such as the Ten Year Club, the Quarter Century Club, and so on; athletic associations; social activities, including singing and dramatic classes; the establishment of summer vacation camps; counseling services; and planned programs of music for employees while at work.

Summary. Collectively, personnel and welfare activities such as those discussed in this chapter form an important part of a complete personnel program. The existence or absence of any one of them may not greatly affect employee morale one way or another. Taken together, however, they comprise a group of activities to which progressive office and personnel managers are giving increasing attention.

23

Payment of Office Employees

There is probably no single subject of greater interest to both the management and the employees than the matter of compensation. If salaries are too low, morale suffers, inferior work is produced, labor turnover increases, real costs of production are likely to be considerably higher than salary rates would seem to indicate, and purchasing power, upon which all business depends, suffers. If, on the other hand, salaries are too high, profits are not what they should be, with the results that the stockholders criticize the management and may turn it out.

In too many companies salaries paid are determined essentially as the result of a bargaining process between the management and the employee or applicant, the amount finally agreed upon being a compromise between what the management is willing to pay and what the employee thinks he should have. This is especially true in the case of office employees, who are not in a position to enforce their demands in the way that factory workers do, or at least do not care to do so. Furthermore, it is only within recent years that any widespread efforts have been made to measure the output of office workers.

Payment of office workers is a subject in which the office manager has an especially definite interest, not only directly because of his duties as personnel manager, but also because compensation is—and if it is not it should be—one of the office manager's principal functional responsibilities in all departments.

Office unions. There has been an increase in the unionization of office employees, and organizing efforts are being pushed. The subject of union relationships is a highly complex one and cannot be treated in a few paragraphs. Obviously, one employee requirement is equitable compensation, and office union organizers have been quick to point out what they term the generally low level of office salaries. They find disorganized salary practices within

companies useful in persuading employees to be represented by them for collective bargaining purposes. Most office unions feature in their campaign literature a demand for a higher minimum salary classification with guaranteed promotion and length of service increases.

The author believes that every office manager or individual charged with personnel responsibilities should be guided by adherence to the fundamentals of sound employee relations. These fundamentals, which are equitable pay, job security, opportunity to advance, recognition of the individual, and good leadership, should be the constant guide posts. The office employee in most cases enters into the job not to become categorized and fixed in a single position as does the average factory worker, but to advance on the basis of his individual contribution to the highest position for which he becomes qualified. Therefore, it is sound policy to develop for the office worker those policies which will permit the maximum chance for the realization of these democratic ambitions.

Need for scientific salary administration. It is evident that numerous injustices often result from a lack of adequate salary standards. Among the evils of such practice are: (1) inequalities in remuneration for similar work throughout a company; (2) improper relationships that often exist between the compensation of different individuals and their respective contributions; (3) salary adjustments based purely on seniority rather than on merit; and (4) the tendency of selfish department heads to oppose the transfer of employees whom they consider valuable.

Fundamental principles. The fundamentals that underlie the development of a sound and practical plan of scientific salary administration may be summarized as follows:

There should be (1) approximate uniformity in remuneration for the same grade of work throughout the company. (2) A logical relationship should be maintained between different grades of work and the respective remuneration for these grades. (3) There is a limit of remuneration for each job below which compensation would be unjust and unethical. (4) There is a limit or remuneration for each job above which compensation would be uneconomical, regardless of how well the work was performed. (5) There should be an opportunity for regular progression from the lowest to the highest limit of remuneration for a job and an opportunity for promotion to positions of higher grade at increased salaries.

It is realized that in almost every organization there is a small

percentage of clerical jobs that cannot be classified. Such jobs require creative imagination on the part of the incumbents. However, the vast majority of clerical jobs can and should be classified. The establishment of a maximum salary for an office job does not in any way stifle the initiative of the employee, but rather develops individuality.

Organization of Job Classification [1]

A job classification project may involve the participation of the employees whose jobs are being analyzed, their supervisors, special staff assistants, and top management. The planning, supervision, and coördination of the initial classification may be under the immediate charge of a staff executive. Previous experience in job classification work is helpful in organizing and directing the program. A special job classification or salary administration committee frequently coördinates the work and acts as a board of review on all original classifications. Such a committee usually includes the head of the job analysis staff, one or two chief executives, and the heads of the operating departments affected by the program. This committee determines the scope of the project, advises on alternative procedures, reviews the findings, and recommends salaries for final approval. The actual job description is usually worked out by a staff member in consultation with the individual worker and supervisor. Some companies, however, have had excellent results in the use of departmental committees composed of representatives of the employees, supervisors, and a staff man acting as secretary of the committee. The evaluation—grading or rating—is done by the staff in close consultation with line supervisors and executives or departmental committee; reviewed by the general classification committee; and finally approved by the chief executive.

The study of comparable jobs in the community and the compilation of "going rates" may be the responsibility of the staff. The coördinating committee usually reviews the results of the classification within the company in the light of community rates, recommends basic rates, and suggests the policy as to individual wage increases or decreases to bring present individual rates into line with recommended job rates. Final approval of basic rates and of any radical adjustments from the old to the recommended rates is usually the responsibility of a chief executive or of a joint negotiating committee.

Steps in job classification. The first step in any job classification program is to make a complete description of each job within the scope of the project. The job description provides the basic information from which (a) the job specification for the use of the employment office, (b) essential points for training, (c) lines of promotion, and (d) classification for salaries are developed. The methods for compiling the job

[1] Adapted from "Job Classification and Evaluation," a report by the Industrial Relations Section, Princeton University, April 1941.

descriptions vary from company to company. However, it is generally agreed that the employee and his immediate supervisor afford the best source of information about the job, that the analyst should observe the job rather than get his data from questionnaires or interviews away from the workplace, that the job should be described as it is now constituted, and that the completed description should have the unanimous approval of employee, supervisor, and analyst. It has been pointed out by many executives with experience in this field that employee and supervisory coöperation in preparing the job description is important not only in assuring an accurate basis for further steps in job classification, but also because it is at this step that the employees and supervisors form their favorable or unfavorable opinions of the program.

Job evaluation. There are two accepted methods of arranging jobs in the order of their importance. The first is that of ranking or grading. This may be done either by ranking the various jobs in order of their relative importance or by breaking them down into a few of their more important characteristics and then grading each from the highest to the lowest depending upon the relative importance of each characteristic. Although the ranking method is quicker, it is not considered the more satisfactory since it does not bring out how far one job is above or below the other. It is sometimes a first step towards rating or may be used as a temporary basis of evaluation until more accurate rating is possible. The rating method of job evaluation involves the breakdown of each individual job into its elemental requirements. Although the rating of certain jobs requires consideration of special and unusual factors, the following list is representative of the items commonly considered in establishing the relative status of a job:

"Skill factors (Includes dexterity, precision, versatility, and coördination).

1. Education (School training)
2. Experience (Job training)
3. Judgment (Includes initiative and ingenuity)
4. Physical ability (Fitness)

Working condition factors

5. Hazards, discomforts, and personal expense

Responsibility factors

6. Equipment
7. Material
8. Personnel"

Other job requirements applicable to the individual job or company are frequently cited.

After the significant job factors have been selected, the range of numerical values is set for each factor. Just what the high and low points should be is a problem for the staff and committee to study and set out carefully. A specific numerical value is then given to each factor for each type of job, and the result is a rating scale with the

jobs listed from top to bottom according to their total number of points.

Establishment of rates. When the scale showing the jobs listed according to their relative point values has been completed, the next step is to convert these point values into dollars and cents. For this step, detailed information as to going rates in the community is necessary. Questionnaires have been used in salary surveys, but personal interview and observation of the job in other companies have proved much more successful since this procedure brings out in more detail the similarities and dissimilarities of the jobs. Full job descriptions and complete range of salaries are needed for the jobs being compared. After there has been a very careful study of this information, a chart may be set up to show quickly the range of community rates for the jobs which were studied. The averages of the salaries paid for specified jobs in other companies are plotted on the chart against the individual company evaluation points for comparable jobs. A similar chart may be prepared for the salary rates in relation to job values for the individual company; the two charts will reveal the disparities within the company and between company and community rates. Whether a company decides to reorganize its own scale and use the community level as a basis or merely to make a few changes depends upon the economic condition and the personnel policies of the individual company. However, most companies which have developed job classification as a basis for salary determination have announced a policy of paying at least the average rates paid for similar jobs in the community.

One question upon which there is considerable disagreement between companies is whether a job should have one definite rate or a range of rates with definite maximum and minimum limits. If the latter policy is accepted, a company must decide whether the range for one job should overlap into the range for the job immediately above and below. The leading factor controlling a decision to have a range in rate for one job is the desire to establish an incentive and to give some leeway for individual performance. A few companies feel also that it is well to permit some increase according to length of service. If a range is used, however, management needs to have some definite means of determining just where in the range the individual employee belongs in order to avoid all possibility of discrimination and favoritism.

Whether or not overlapping ranges are used depends upon the proximity of the quality differences of the adjacent jobs on the scale. Today the overlap is much more prevalent.

Administration of plan. When the initial job classification, evaluation, and rate setting have been completed, there remains the necessity of keeping a careful check on the established job descriptions and comparative rates. The same staff that set up the project usually oversees its maintenance. The coördinating committee has to keep abreast of new salary trends and be in a position to consult with the staff regarding any important changes. As in the original job classification, changes

in job structure affecting rates involve consultation with the employees and supervision.

Necessity for periodic review. In order to keep the job classification up to date, companies have found that it is necessary to make a complete review of the entire plan at regular intervals. Today these reviews are needed more frequently as new conditions affect the job structure. The partial breakdown of a skilled job may create one or more semi-skilled jobs which have to be described, evaluated, and placed in their relative positions in the scale. Great care may have to be taken to prevent disturbance of accepted job relationships.

The National Office Management Association has released a more specific clerical job evaluation plan.[2]

Clerical Job Evaluation

Purpose. The purpose of job evaluation is the equitable distribution of payroll dollars among all employees within a given group, or groups, in accordance with the effort and skill required and the responsibilities of each job performed by the group, or groups, under consideration. Only through the relation of each job to all other jobs within such a group can this be accomplished.

Procedures. The first and most important step in any evaluation plan is to secure a thorough detailed description of each job to be evaluated.

The best method of obtaining such a description is through the use of a job description form, on which should be recorded complete information relative to the job. It is recommended that the job description be prepared by the employee, reviewed and approved by the supervisor, and then submitted to the Job Evaluation Committee. A suggested form for this purpose is shown in Figure 77. The Committee's responsibility is to rate only on the basis of what the job demands. Its purpose will be defeated unless personalities of individuals, individuals on jobs, and salaries paid are excluded when determining point values applicable to the various factors involved.

The Committee should always bear in mind that its purpose is to determine the minimum requirements of each job being evaluated and should not concern itself with salaries to be paid; a point plan of evaluation makes this possible. The application of salary rates to factor point values, incentives, and merit ratings is a matter to be considered separately.

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[2] Adapted from "Clerical Job Evaluation," prepared by a special committee of the Detroit Chapter of the National Office Management Association, 1946.

JOB DESCRIPTION

Date: December 3, 19 .

Name: Typist Dept.: Purchasing

1. Nature of work. (Please itemize the operations such as correspondence, typing, calculating, interviewing, etc., and give approximate percentage of time spent on each.)

	Percent of Time Per Month
Does all typing, marking, checking, and sorting of purchase orders for the Company.	100%
The typing is transcribed from requisitions sent by the various departments of the Company.	

2. Machines Used. (Typewriter, calculator, etc.)

	Percent of Time Per Month
Typewriter	90%
Ditto Machine	

3. If your job includes correspondence, do you:
   - Use a dictaphone? ..... No
   - If so, who transcribes your letters? ..... No
   - Dictate to a stenographer? ..... No
   - If so, to whom? ..... None
   - Approximately how many letters per day? ..... None
4. Is your work checked or examined by others?
   - By. whom? ..... No
   - Do you check work of others? ..... No
   - If so, whose? ..... None
   - Do you supervise the work of others? ..... No
   - If so, how many persons and nature of work? ..... None
5. As briefly as possible, give a complete description of what you do in performance of your duties, indicated above. (Attach as many extra sheets as necessary.)

Includes typing of all purchase orders for the Company—requiring the use of the ditto machine for extra copies. The orders must be accurately typed and checked. The typist must be able to identify and type special clauses on purchase orders.

Routine:

Requisitions are prepared for copying as follows:

1. They are sorted for the required routing.
2. They are dated, checked for destination, and miscellaneous references stamped on them.
3. Purchase orders are typed and checked for accuracy before they are released. These orders must be done quickly as well as accurately.
4. All orders are checked for the correct number of copies to be included and for all necessary clauses and notations.
5. They are then sent to an authorized party to be signed.
6. After they have been signed they are returned for separating and mailing.
7. A record is kept on cards of the purchase order number and the rating given to special orders (AA3, AA4, etc.). These orders are also recorded with the vendor's name, purchase order number, date of delivery, material required and the total cost of the order.

May be called upon to replace other stenographers or typists in other divisions of the Purchasing Department during vacations or illnesses and also relieve at the Information Desk. Also does miscellaneous typing of reports and statements for various divisions. Answers inter-company telephone.

Approved .....
Immediate Supervisor

Fig. 77

JOB FACTOR CREDITS

	Maximum Point Values		*Percentage to Total*	
SKILL		250		25
ELEMENTAL				
1. General or special education	160		16	
2. Training time on job	40		4	
3. Memory	40		4	
4. Analytical	95		9.5	
5. Personal contact	35		3.5	
6. Dexterity	80		8	
7. Accuracy	50		5	
Total		500		50
RESPONSIBILITY				
8. For company property	25		2.5	
9. For procedure	125		12.5	
10. Supervision	50		5	
Total		200		20
EFFORT				
11. Place of work	5		.5	
12. Cleanliness of work	5		.5	
13. Position	10		1	
14. Continuity of work	15		1.5	
15. Physical or mental strain	15		1.5	
Total		50		5
Grand Total		1000		100

From the foregoing it will be seen that 25 per cent of the maximum credits allowed are allocated to the factor "Elemental," 50 per cent to "Skill," 20 per cent to "Responsibility," and 5 per cent to "Effort."

Obtain a complete description of each job to be evaluated.

Review each job description carefully and indicate thereon any item needing special consideration.

To the Job Analysis Sheet (Figure 78) post all pertinent data necessary to determine factor ratings. Assuming you were rating one hundred jobs, you should rate all of them one factor at a time.

When Job Analysis Sheets have been prepared for all jobs being evaluated, the sheets should be sorted into groups, as determined by the total number of points credited to the individual jobs. After this breakdown is made, the points credited to each factor for each job should be reviewed in relation to all jobs within that particular group. The next step is to summarize the information.

	Point Value
1. Grammar school or equiv.	0
2. Up to 2 years' high school or equiv.	2—4
3. Up to 4 years' high school or equiv.	6—8
4. Up to 2 years' special training above a high school education or equiv.	10—12
5. Up to 4 years' special training above a high school education or equiv.	14—16

Factor No. 3—Practical Experience Required: The degree of this factor is determined by the amount of experience judged necessary to fulfill minimum position requirements.

	Point Value
1. Where no experience is necessary	0
2. Where some experience is preferable but can be accumulated during 3 to 4 months' employment with the company	1—3
3. Where sufficient experience would necessitate approximately one year of employment with the company in related positions	4—6
4. Where the necessary experience would require approximately three years' employment with the company in related positions	7—9
5. Where considerable experience is necessary in related positions so as to acquire a thorough over-all knowledge; this experience to absorb approximately five years	10—12
6. Where extensive experience is imperative in order to fulfill the position requirements. This would be considered as requiring over five years' company experience in related positions	13—15

Factor No. 4—Analytical Requirement and Complexity of Work: This factor recognizes the difficulties and complications of the assigned task and measures the extent to which the work involved requires analytical ability, exercise of judgment, initiative and ingenuity.

	Point Value
1. Where the assigned task is of a simple nature and obvious conditions can be readily recognized	0
2. Where the assigned tasks consist of routine or standard matter, but demand recognition of a deviation from the accepted routine.	1—3
3. Where the assigned task necessitates a weighing of facts and the exercise of a limited amount of judgment in decisions. It also involves performance of several different kinds of clerical or manual operations	4—6
4. Where the assigned tasks make it necessary to devise data, requiring certain initiative and ingenuity, solve special problems, and make reliable decisions	7—9
5. Where it is necessary to ascertain certain facts, weigh them, and present important or costly decisions to management without the benefit of guidance	10—12
6. Where unusual and important facts must be weighed and analyzed, calling for an extreme exercise of good judgment, and where independent action is essential and will have a bearing on quality or cost	13—15

Factor No. 5—Accuracy: This factor considers the opportunity the work offers for errors and the relative magnitude of the consequences. It also recognizes the availability of supervision to detect errors promptly and the amount of dependence placed on the accuracy with which the task is performed.

	Point Value
1. Where possibility of error is negligible. All jobs require a certain degree of accuracy	1—2
2. Where preliminary routine work is assigned, and where errors are possible but easily detected and corrected	3—4
3. Where the cost of correction will be considerable, because of the difficult nature of the work and the degree of dependence placed on the performances	5—6

Factor No. 10—Continuity of Work: This factor refers to the degree of continuous performance without benefit of interruptions or breathing spells due to necessary conversations with others, etc.

	Point Value
1. Where ample time for stoppage of work is possible due to any causes	0
2. Where work is varied and necessitates some stops for discussion or advice	1
3. Where the work is routine and planned for long periods with little opportunity for interruption	2—3
4. Where it is imperative to stay at the task constantly with rare opportunities afforded for breathing spells	4—5

Factor No. 11—Physical Strain on Senses: This factor recognizes the nervous strain or eyestrain connected with certain tasks or positions.

	Point Value
1. Where there are few involuntary interruptions or very little close figure work which demands concentrated vision	0
2. Where part of the work involves eyestrain	1
3. Where the major portion of the work involves constant eyestrain or close figure work	2—3
4. Where numerous involuntary interruptions are part of the day's work, requiring much concentration and nervous strain to pick up the trend of thought or stoppage point	4—5

Factor No. 12—Relations or Contacts: This factor measures the extent and relative difficulty and importance of the work handled with and through other departments or other companies in connection with the effect of these contacts on plant or public relations.

	Point Value
1. Where this factor is negligible	0
2. Usual contacts with other departments within the company on matters involving flow of work which has been standardized to a large extent and requires no decisions	1—2
3. Contacts with other departments within the company on matters involving decisions or disposal of certain activities which may lead into many discussions as to the best disposal or decision	3—4
4. Contacts within the company or with the public or both which involve the making of substantial adjustments which involve money or company policy	5—6
5. Contacts within the company or with the public or both which involve important agreements or disposal of serious matters which could greatly affect future relations	7—8

The total selected point value, when converted to its relative monetary value, indicates the maximum job rate. A system of increments and decrements has been established, and the current monetary value of the job is fitted into the closest rate in the increment progression. A rate range is employed, and the number of grades within the range is decided by the possible spread of ability that can be applied to the job.

Incentive compensation versus straight salary. Ever since Mr. F. W. Taylor pointed out the desirability of accurately measuring the quality and quantity of production of every employee and compensating him either wholly or in part on a measured produc-

tion basis, it has been the practice of an increasingly large number of manufacturing organizations to pay their factory workers on some sort of incentive wage plan. That the adoption of such methods has been of untold advantage to both the employer and the employee needs no reiteration here.

Prior to about 1925 only scattered attempts were made to apply the principles of incentive compensation to offices, owing primarily to the assumption—which has since proved to be quite without foundation—that both office work and office workers were somehow "different." It is true, to be sure, that in many offices, particularly those of small or moderate size, the same employee does many different kinds of work. It does not follow, however, that it is impracticable to install incentive compensation methods in other situations where the work is more specialized and can readily be measured. During the last twenty years, more and more concerns have found it both practical and desirable to adopt some type of extra incentive or bonus plan in compensating their office workers. The results in almost every case have been increased earnings for the employees and a decreased cost to the company per unit of work performed.

3. The next thing for the office manager to do is to separate the standard operations that are expected to appear from day to day from the other, miscellaneous operations. He should then consider each of the standard operations to determine the units. In standardizing order writing, for instance, it may be best to consider the entire order as a unit, or, if the number of items per order varies a great deal, it may be fairer to use the number of items per order as a unit.

4. After the unit has been determined, the office manager should outline each operation, and describe exactly what the operation consists of and what the unit is. This is then given to the clerk and explained to him carefully. All unstandardized or miscellaneous work should be placed in the "Miscellaneous" column, with an explanation of the work in the "Detail" column.

5. At the end of the week the office manager should figure the total minutes, the units, and the units per minute for each operation as shown on the clerical production time sheet. From his own experience and from the experience of his department head, he should consider whether this unit per minute is about what an average clerk should produce. Whenever the figure seems extremely high or extremely low, an immediate investigation should be started with a view to determining what is wrong, so that the faults may be corrected.

6. After the office manager is satisfied that all faults regarding the operations of the clerk have been corrected and that the clerk is working at a fair average speed, he should then consider this average speed figure in units per hundred as standard time. In determining this unit or standard time the office manager should allow about 6 or 8 per cent for idle time or recreation. Whenever possible, the clerk should have standardized work only. If there are several in a department, perhaps one clerk will do all unstandardized operations.

7. If the office manager wishes to establish a premium or bonus system, there are various methods of doing this: He can establish a rate per piece or per unit, thus placing the standardized work on a straight piecework basis. He can use the unit as a method of raising a clerk's pay, or of establishing different rates of pay according to the output. Or, he can compute the difference between the standard time and the time used, and allow a bonus for this saving. For example, a girl may be guaranteed a stipulated salary. During the week she works 2000 minutes on work for which the standard

time is 2400 minutes. The girl saves 400 minutes, and therefore is paid a bonus based on a certain amount per minute saved.

Specific examples of incentive compensation methods. The following cases illustrate a number of specific applications of incentive compensation methods.

Bookkeeping-machine operation.[4] For an average of 350 postings a day the bookkeeping-machine operator receives a bonus of $7 per month in addition to her regular salary; for each 50 postings over 350 she receives $3.50 extra. A penalty of 25 cents per error is charged the operators when they are directly responsible for the error. The operators average from $17 to $24 extra per month.

Dictaphone operation. A bonus is paid based on the total number of square inches of typed material produced by the group. The bonus is calculated as follows:

$$\frac{\text{Total output} - (4100 \times \text{No. of Operators})}{4100 \times \text{No. of Operators}} = \%$$

$$\frac{\% \times \text{Total wages of Operators in department}}{\text{No. of Operators} \times 2} = \text{Dollars of bonus per Operator}$$

Example:

$$\frac{\text{(Total output)}}{28{,}000} - \frac{(4100 \times \text{five Operators})}{20{,}500} = 7{,}500$$

$$\frac{7{,}500}{20{,}500} = 36\%$$

$$\frac{\text{(Total wages)}}{\$90.00 \times .36} = \$3.24 \text{ (Bonus)}$$

$$\frac{}{5 \times 2}$$

Punching tabulating cards. Operations are divided into three classes, depending on the difficulty of the reports involved, and a bonus rate is established for production above the standard in each class. This bonus rate increases from 1 cent to 24 cents per hour. Bonuses are paid every four weeks on the regular pay day, and are based on records for the entire period, great value being attached to sustained output for a month. Five per cent of the bonus earned for the entire bonus period of four weeks is deducted for each day's absence.

Where errors occur, a deduction of five cards for each error is made from the class in which the error occurs, before figuring the bonus. This applies to cards incorrectly punched and detected after leaving the operator's desk.

Methods and experience of a large clerical organization.

Transcribing cylinders. For transcribing cylinders the company has established a standard task of 2000 points per week and a rate of $1.25 per 100 points net. When a new operator is put on the pay roll she is given a minimum guaranty for four weeks. If she produces in excess of 2000 points net, she is given all she earns. If less, she receives the weekly minimum guaranty. At the end of four weeks, the guaranty is withdrawn and she is paid at the rate of $1.25 per 100 points for her net production up to 3000 points per week. When 3000 points net per week ("the point of participation") has been reached, the rate is automatically reduced to 75 cents per 100 points.

Figures for other operations are summarized below.

Typing, including cards, listing, straight copy work, form letters, and addressing envelopes. Rate, 90 cents per 100 cyclometer points net. Four weeks' guaranty, $17. Standard task, 1900 points net. Point of participation, 2700 points net. Rate for excess production, 60 cents per 100 points.

Addressing envelopes. For addressing envelopes from letters written by transcribers, the rate is $1.25 per 100 cyclometer points net. Four weeks' guaranty, $17. Standard task, 1360 points net. Point of participation, 1900 points net. Rate for excess production, 75 cents per 100 points net.

Speed-o-feeder. Speed-o-feeder addressing envelopes from cards or lists. Rate, 22 cents per 199 envelopes. Point of participation, 11,000 envelopes net. Rate for excess production, 15 cents per 100 envelopes.

Penalty for errors. The penalty for errors is 5 per cent of the daily production per 100 typographical errors and for each letter which, due to the operator's carelessness, must be rewritten.

Results obtained. The two most frequently voiced objections

to compensation on a measured production basis are the tendency of the management to cut rates and the tendency of the workers to indulge in harmful speeding. This company believes it has eliminated these two difficulties by establishing for each operation a "point of participation." This point represents a good, steady, day-in-day-out production for a fast worker. Workers are given the regular rate calculated weekly until this point is reached. After passing the point of participation they are paid roughly 60 per cent of the standard rate. The company is interested in keeping its workers. It does not want them to injure themselves through over-exertion or nervous strain. For these reasons a part of the incentive is removed when the point which is regarded as a fast week's work is reached.

Under this plan the transcribers' production increased 27 per cent. Cost decreased 16 per cent. All the workers earned more than their former salaries. Typing cost decreased 28 per cent. Some of the typists more than doubled their production. Approximately 15 per cent of the workers regularly exceed the point of participation.

A questionnaire to which no signature was required indicated that 85 per cent of the workers were in favor of the plan. The remaining 15 per cent were not hostile, but would be as well satisfied with straight salary work. None reported any feeling of strain.

The advantages of bonus plans for dictating machine operators. The following discussion by Miss Trusselle Harvey, of the General Electric Company, of bonus plans answers some questions usually asked about such plans.[5]

Any odium still attached to bonus plans for office workers is due in major part to popular misconceptions about them—and these, fortunately, are disappearing fast. There is no reason, however, why bonuses should not be *entirely* acceptable to, even popular with, office workers.

The gains to the workers include, in addition to the obvious and most important factor of increased earnings, such less obvious benefits as equalization of working conditions (removing a frequent cause of friction); relief from the pressure of supervisory concern over production; and greater job satisfaction in seeing extra effort and ability promptly rewarded. Management, in turn, benefits from the lowered operating costs resulting from increased production, as well as from the improved income status of the employee. Higher income jobs draw and hold more responsible, better educated, workers.

[5] Harvey, T., "The Advantages of Bonus Plans for Dictating Machine Operators," *Office Management and Equipment*, April, 1916, p. 37.

Among office jobs affording possibilities for incentive applications, dictation machine transcribing offers a fruitful field because of the standardized, repetitive nature of the work.

Installation of a bonus plan for dictation machine operators should be preceded by studies of existing averages over a considerable period of time and investigation of similar plans in other offices, as well as conferences among comptroller, office manager, and transcribing department supervisor to determine and agree upon standards and objectives.

When a bonus plan is first contemplated, the supervisor of the transcribing department usually has four major questions. She wants to know:

1. Won't a bonus plan affect morale? Don't operators resent having to work harder for the same income?

This is popular misconception number one. It presupposes that the employer is going to cut salaries to a nominal figure—substituting a bonus for the difference. There is no reason why this should be done. The bonus will pay for itself, even if superimposed on existing salary scales. By way of illustration, assume that a unit of four dictation machine operators transcribe an average of 700 lines per day. After the installation of a bonus plan, the total production is increased by an average of 150 lines per day per operator—an altogether reasonable expectation. On a bonus basis of, say, one-half cent per line for every line transscribed over and above the former average of 700 lines, the output and bonus of each operator might result in something like the following:

	New Average *	Required Average *	Bonus Paid on *	At ½¢
Operator 1	750	700	50	$ .25
Operator 2	900	700	200	1.00
Operator 3	800	700	100	.50
Operator 4	950	700	250	1.25

* Figures refer to number of lines transcribed.

As a direct consequence of the bonus, then, the total production of the four operators has increased by 600 lines per day—the approximate output of one additional operator, obtained at a cost much lower than would have been involved in hiring a new operator.

The amount of bonus and required linage before bonus can be adjusted upward or downward at the discretion of the individual company to yield more or, if desired, less than this amount in savings, but best results are obtained when the company and the employee share equally in the monetary benefits resulting from the increased production.

2. Doesn't the quality of work suffer as a result of the speed-up?

The answer to this question depends upon the standards the company has maintained toward quality of work. Employees do not easily lose their good work habits, especially if the company itself has consistently maintained high quality standards. The need for accuracy and care should be emphasized at the time when the bonus plan is installed and should be stressed during the training period for new employees. Re-

course to frequent reminders, spotchecks, and occasional "inspirational" talks may be necessary in individual cases.

To strengthen the initial advantage of good training—particularly in companies where high quality has not been attained prior to the installation of a bonus, or where it is felt that the bonus might cause a lapse—the system can be installed with a condition, namely, that only operators whose work is up to standard shall be eligible for the bonus. There will always be a few whose quality of work and immediate production entitle them to a bonus at once—entitle them, in effect, to more money without extra effort. These employees will enthusiastically advocate the bonus plan, causing others to fall in line. The supervisor may well find that this group tends to pull up the standard of the whole department.

3. How can work be distributed fairly so that all have an equal opportunity to make a bonus when the dictation of some men is more difficult than that of others and must be confined to operators experienced in handling it?

First, it is important to eliminate all obvious sources of inequity. For example, employees should not be permitted to choose work from a central rack at their own discretion. The work should be distributed on an impersonal basis by the supervisor or by an assistant who will be above favoritism. Then, the problem can be approached in one of two ways:

(a) Grade work according to skill required, confining dictation falling within those grades to operators best able to handle it, and paying a graduated bonus proportionate to the skill required. If desirable, the same principle of graduated skill might be worked out on a salary basis, leaving the bonus a uniform amount for all

on workers if she has reason to believe that they are putting forth their best efforts.

Other forms of extra compensation. In many offices, particularly in those where the nature of the work is such that measured production methods of compensation are not practical, other plans of extra compensation are in force. For example, one well-known company has in operation among its branch offices what is known as a "gain-sharing system." Under this system each branch of the company works out a per dollar cost of doing business for its territory. These costs are a total of what it considers average good management can produce. To these costs, 2½ per cent is arbitrarily added, and any savings under these total costs are divided equally between the company and the branch office, if the amount does not exceed 25 per cent of the total salaries, or 25 per cent of the individual salaries. This gain is distributed among the office or clerical employees in the branch, more or less according to salaries, but more particularly to the individual employees producing the best results. Gains in excess of 25 per cent, or losses, are carried forward, and, if not absorbed, are dropped in a six-months' cycle.

Annual bonuses, usually paid at year-end, are also in wide use among business concerns, particularly in banks and financial institutions. Such bonuses are usually based either on length of service or salary, or on a combination of these factors.

Conclusions regarding incentives. Whatever one may think about the theoretical desirability of paying a bonus to get something done which employees should be expected to do without additional reward, the fact is that everyone, from executives to the lowest-paid employee in the organization, responds to the spur of an incentive. In dollars and cents the amount of the bonus may not seem at first thought to be worth the effort. Yet when it is considered in the light of the proportion that it bears to the total earnings of the employee in question, the reason for its good effect becomes more apparent. Thus, an opportunity to earn $1.50 extra a week may not seem of much consequence to the department head whose salary is $5000 a year. To the employee receiving $30 a week, however, such a bonus is equal to 5 per cent of her salary. An opportunity offered to the department head to increase his income 5 per cent would certainly be regarded favorably, and the same psychological laws that govern his reaction motivate the feelings of the rank-and-file worker.

24

Supervision of Office Employees

In the preceding chapters the principles, methods, procedures, and techniques with which the practical office manager should be familiar have been discussed in some detail. A knowledge of all of these matters is essential to success in office-management work. Yet a person who has only a knowledge of office system, routine, and operations, no matter how complete it may be, can never successfully fill the position of office manager. The manager also must be an executive. Every office executive has the two-fold job of getting out the work and handling human relations.

The average person craves leadership. Most people want a leader to follow. All humanity is made up of leaders and followers. The followers are legion, but good leaders are scarce. The person with ability to lead has no difficulty in finding willing followers. But people will not willingly fall in line behind a superior who does not lead.

What supervision involves. Literally, supervision means looking over or overseeing, and its object is to get the work done on scheduled time and as economically as possible. Simple as this may sound, it is in itself a large order—larger in fact than the average office supervisor is able to handle satisfactorily. A brief examination of some of the more important factors involved in supervision will make the reasons for this statement clear.

Supervision involves, first of all, a knowledge of the extent and limits of the authority and responsibility inherent in the position or granted to the individual who is to supervise. The necessity for clearly defining authority and responsibility has been stressed so frequently in previous chapters that it is almost trite to repeat it here. Yet nowhere is it more important that authority and responsibility be clearly defined than in the field of office management. Unfortunately, the office manager himself sometimes suffers because of the lack of a clear definition of his own work. He may be held responsible, for example, for the general cleanliness of the office, yet

the contractor whose employees do all such work may feel that his primary responsibility is to the purchasing agent who signed the original contract or to the treasurer who pays him each month.

No matter what his own position and problems in this respect may be, however, the office manager should be sure that he does not impose similar burdens on his subordinates. If, for example, the nature of the business is such that skeleton staffs of the various office service sections, such as the central stenographic, the duplicating, the mail-and-messenger, and the elevator service, must be maintained after hours, either regularly or periodically, the office manager should delegate to one person the responsibility for all such activities. To allow each section to function independently under such circumstances is to invite internal disagreement, with consequent jeopardy to the work. The first essential of leadership, therefore, is the ability to assign authority and responsibility clearly and definitely.

Second, proper supervision involves a thorough knowledge on the part of the supervisor of the work to be done. Again, this point may seem trite and elementary, yet in practice it is by no means always observed. While the highest management executives naturally do not expect the department heads to be familiar with every detail of every activity carried on in their departments, they have every right to expect them to know quite specifically what is going on.

As an important department head, the office manager should make it his business to keep closely in touch with all the activities of his department, so that when he is asked, perhaps quite unexpectedly, what the company's practice is in a given matter or why a certain thing is done in a particular way, he can answer without hesitation. An executive or supervisor who must rely on an assistant to supply the salient facts about a matter over which he has control soon loses the respect of his superiors and of his subordinates.

While other qualities are essential, of course, a thorough knowledge of the work is an all-important point to be borne in mind in the selection of a supervisor. It is highly desirable, for example, that the person in charge of a centralized stenographic transcription department be an experienced stenographer or operator herself. The office manager should make it his business to check up periodically on the details of the work for which each supervisor is responsible, in order to see that each one is fully familiar with what is going on in his own section.

Third, good supervision involves an appreciation of the relative importance of current and pending work. An industrial engineer once said that all business operations consist of two kinds of details, symptomatic and routine. The intelligent and experienced executive knows almost instinctively into which class any given matter falls; if supervisors do not know, it is one of the prime duties of the office manager to teach them as quickly as possible. A good sense of proportion is as important in business—and in life—as, for instance, a good sense of humor.

Specific cases with which both the office manager and the supervisor are familiar, and which are taken directly from incidents in the day's business, provide the best object lessons, if any are needed. For example, a supervisor may report to the office manager her inability to complete certain work on time. Two essential questions should be settled at once: first, the importance of the uncompleted work and, second, the cause of the delay. If time is not an especially important factor, or if the delay was caused by the unexpected and temporary absence of an employee, the matter may be regarded as routine. If, on the other hand, the work must be finished by a given hour or if the department is constantly behind schedule, and if this situation is merely one of a number of similar cases that have occurred recently, then the matter obviously is one that requires immediate attention and thorough investigation. More than one office manager has suffered a serious loss in standing in the eyes of his superiors because he has neglected to make sure that his immediate subordinates had the proper appreciation of the relative importance of current and pending work.

Fourth, supervision involves the ability to get along well with others—including superiors and subordinates. One of the practical problems involved here is to strike the proper balance between being too strict and being too lenient. Good discipline is essential, of course, in any organization. The strict disciplinarian, however, is more likely to receive obedience rather than coöperation. The lenient supervisor, on the other hand, often does not have the real respect of his subordinates. The best supervisors—and executives—are those who have the confidence, coöperation, and respect of their superiors, associates, and subordinates.

An essential quality for getting along well with others is the ability—and willingness—to see both sides of a situation. All too often supervisors thoughtlessly disregard the responsibilities, feel-

ings, or ideas of others, and then wonder why they do not seem to get along well with them. The supervisor may know at eleven o'clock in the morning, for example, that rush work is coming through that will make it necessary for certain employees to work overtime that evening. However, instead of letting her subordinates know promptly—before lunch perhaps—she says nothing until four or half past in the afternoon, when she lets it be known that certain employees must stay overtime. Naturally they resent such late notice, and if the practice becomes a habit, they may begin to make excuses for not staying, thus embarrassing the supervisor and her superior as well.

Fifth, the supervisor must be able to teach others. Reference was made in a previous chapter to the fact that training office employees necessitates not only a thorough knowledge of the work, but also the ability to impart that knowledge to others. Patience is also essential to success in all such work.

One common fault, which the office manager constantly must guard against, is the tendency of supervisors to assume that employees understand just what to do after some procedure has been explained to them once, or twice at the most. While constant reiteration should not be necessary, the average mind can absorb and hold only a relatively few simple instructions given at one time. Thus for the supervisor to spend the first half-day with a new clerk going over the work, to make a brief check-back a day or two later, and then to assume that the clerk is trained—or that at least she certainly should be—is to expect the impossible. Whenever the office manager has reason to believe that this is being done, quite unintentionally, perhaps, he should query the supervisor carefully as to exactly what steps are being taken to train new employees, emphasizing the fact that successful training is a relatively slow process which necessitates going back over the same ground a number of times.

Last, the supervisor should fairly represent—not misrepresent—the viewpoint of the management. Some supervisors are prone to lay the blame on "the management" when an unwelcome order must be given or a penalty imposed. While it is of course true that the management must accept the final responsibility for all decisions, it is manifestly unfair to lay the blame at its door for something for which it is not responsible. A supervisor, for example, may have neglected to have certain work completed when it was

due, solely because of inertia or procrastination. Realizing the vulnerability of her own position, she blames "the management" for demanding that the work be gotten out immediately.

The office manager himself must be especially careful to represent fairly the viewpoint of the management. In most cases the office manager is the contact point between the executive officers on the one hand and the supervisors and employees on the other. He is frequently informed of management decisions having to do with policy and then given the responsibility of interpreting them to those affected. In such cases, of course, he must be sure, not only that he fully understands the executive viewpoint and the reasons for it, but also that he interprets it fairly to others. There is, perhaps, no one person in the organization who has a greater opportunity to reflect the viewpoint of the management correctly and fairly to the employees than the office manager.

Assignment of authority and responsibility. In an address before the 1944 Office Management Conference of the American Management Association, James P. Mitchell, Director of Industrial Relations of R. H. Macy & Co., made the following observation about a large organization which had been engaged in the production of vital war material: [1]

> I was struck, as soon as I set foot in the door, with the attitude of the employees. The place reeked of inefficiency, lack of discipline, carelessness, and all the other things which we associate with low morale. The question naturally came to mind, "Why isn't this company with its well-conceived personnel program effective on the firing line?"
>
> A basic reason was to be found in the absence of real supervision in the company. In spite of a comprehensive job analysis program which attempted to define job content and time every operation, no attempt had been made to define clearly the job responsibilities and authority of the lower, middle, and top management. As a result, first-line supervisors often did not know to whom they reported or why, nor did they know what their responsibilities and authority were and, of course, they evaded whatever responsibility came their way. Conflicting instructions from higher authority and misinterpretation of company policy caused utter disregard and disrespect for supervisory authority on the part of the employees. Because the organizational responsibility of the supervisory line had not been clearly established and supervisors' functions had been only hazily defined, and because the line supervisors were subject to a constant barrage of conflicting instructions from numerous staff divisions, including the personnel department, the work of most

[1] Mitchell, J. P., "Fundamentals of Employee Morale," *Office Management Series* No. 105, American Management Association, 1943, p. 5.

units in the company was poorly organized. The employee reflected the confusion because:

1. He received no supervision, guidance, or direction from his immediate supervisor who, in reality, was the only management representative to make effective, so far as he was concerned, the well-conceived personnel policies; and,

2. Lacking supervision, he, the individual, did not have a satisfying day's work—this is, satisfying to him in terms of quantity or importance. He either had too much or too little to do—in most cases, too little—and I submit that the employee who does not produce a well-defined, sustained, daily output is a potentially disgruntled employee whose morale will never improve despite all fancy morale programs.

As one of the largest employers of all time, the Army Service Forces, which employed 800,000 employees, among whom were many thousands of office workers, recognized the problem of supervision as a paramount one. General Somervell stated to a Congressional Committee that the solution of the manpower problem among civilian workers in the War Department lay in providing adequate supervision. As an aid in providing satisfactory supervision, the services of the Training Within Industry Service of the War Manpower Commission were enlisted.

The office manager, whose functions may well be construed to parallel for a given company the functions which the Army Service Forces performed for the War Department, will do well to accord an equally important place to supervision in any blueprint for successful accomplishment of his responsibilities. Although the science of supervision can be exceedingly complex, its fundamentals though expressed in different language can be reduced to basic factors such as the essentials of leadership which have been outlined here.

The Training Within Industry Service of the War Manpower Commission, in developing Job Instruction Training, Job Method Training, and Job Relations Training, stated that efficiency and improvement are the result of skilled supervision and that such skill can be acquired by attention to basic needs.

In this program it is emphasized that skilled supervision requires a thorough knowledge of responsibilities and authority and that such knowledge must be met currently if subordinates, whether supervisors or staff employees, are to know and do their jobs efficiently and well.

Many companies have attempted to meet the need for keeping the knowledge of responsibility current by the requirement that any assignment involving a change in responsibility or authority be

reduced to writing. Size of company and need for flexibility must be determining factors in setting up such procedural requirements. In general, if regular areas of responsibility and authority are understood by those who must accept and exercise these, concise and clear verbal instructions will suffice and provide operating flexibility.

Knowledge of the work to be done. The importance of having a knowledge of the work to be done cannot be overstressed. If the reader who is an office manager feels, as he reviews that which is encompassed in office management as outlined in the pages which have gone before, that this is a large order, it can only be said that he is correct. However, knowledge of the work to be done is the keynote to successful supervision.

Knowledge of the work to be done influences the caliber of supervision in diverse ways. It is obvious that without such knowledge bottlenecks and delays may result, and few office managers can get work done on schedule or manage economically under such circumstances. In the case of office management, where so much of the work to be done is of a service nature and where many phases involve getting results through supervisors and employees who must work with supervisors and employees in other company departments, without it no satisfactory assignment of authority or responsibility can be made. When gauging the relative importance of jobs to be done and when reviewing reasons for delay, no meaningful yardstick can be applied without a knowledge of the work to be done.

The author has not attempted to relate the realm of medical and psychiatric practice to office management. Nevertheless, when lack of knowledge of the work to be done results in inefficient or delayed service, there can be no degree of success for the office manager in getting along well either with his superiors or with his subordinates. The office manager who finds himself harassed and criticized by those departments to whom he renders service and by his superiors for lack of results will receive little sympathy from his subordinates if the trouble can be found in his lack of knowledge of the work to be done.

Because office management is a business matter involving many types of operational, service, and office production detail, there is little that can be taught on the basis of inspiration alone. Lasting and effective teaching, which has been covered under the references to training in a previous chapter, can best be done by following the tell-and-explain, show-how, observe-and-check, and

follow-up-and-repeat principles on which all training is based. Only with knowledge of the work to be done can this type of teaching be achieved.

In that representing his management correctly and fairly is an integral part of any supervisor's job, it is essential for effective supervision that each individual in a supervisory position know his expected part in a company's program of employee-management relations.

The results of employee attitude surveys which were discussed in earlier pages have reflected in many instances the disrespect for supervision and the poor morale which results from the poor supervision of those who do not have a proper knowledge of the work to be done. In a recent employee attitude survey conducted by a large life insurance company, one of the questions asked of employees was: "Does your immediate supervisor have adequate knowledge for the satisfactory performance of his responsibilities?" The general morale of the company was high, based on the analysis of the confidential replies received, but in every case where the majority of a group of employees reporting to a particular supervisor answered the question above negatively, the morale of that group was either lower than the average level for the company or was poor.

Appreciation of the relative importance of work. No single statement satisfactorily defines the quality which must be present if the supervisor is to master this quality. Judgment and common sense combined with an awareness of the need for timing are the characteristics which make for effectiveness in this quarter. Unless the supervisor can overcome any deficiencies in this direction, he cannot achieve good results. Mr. LeRoy H. Kurtz, of the Department of Public Relations of the General Motors Corp., presented a paper before the Society for the Promotion of Engineering Education at its fiftieth annual meeting in which he discussed the maintenance of executive efficiency. He made the following statements in summary:

For their own guidance and to establish their proper standing in the organization, executive personnel should be evaluated periodically.

Prompt action should be taken to head off any apparent unfavorable trend in executive effectiveness.

Long- and short-term goals and standards of performance should be established for the business as a whole and for the individual executive and the departments or branches under his supervision.

The result of good leadership is a confident and ready organization, able to handle calmly any emergency as it arises. In such organizations it is not necessary to make a hasty sweep of some officials when new conditions arise, on the ground that they were competent to operate in normal times but have suddenly proved useless when the going has become hard.

As a means of evaluating executive personnel, he suggested the determination of effectiveness in terms of Executive Techniques. The scoring scale recommended for this determination weights very heavily those qualities which relate to appreciation of the relative importance of the work to be done. Ten contributing techniques are to be evaluated, and among them are Organization Ability, Coördination, Analysis, Planning, and Execution. In other words, 50 per cent of the techniques employed bear on the supervisory executives' ability to get work done by analyzing, planning, organizing, coördinating, and executing. These are the techniques which if skillfully applied lead to the proper appreciation of the relative importance of the work to be done.

Getting along well with others. This is a many-sided problem. There are superiors, subordinates, those for whom services are performed, the public, and other categories with whom those in office management must get along. Public and employee relations are not fads that will diminish and disappear. Many intangibles and semantics surround any presentation, and not merely chapters but many books have been written on these subjects alone. No discussion here can be complete, but in outline and by example some salient material is included to give the reader some perspective on this field. which warrants a great deal of intensive and considered study.

Mr. L. C. Hart, Vice President of the Johns-Manville Corporation, in discussing the subject of human relations, stated: [2]

Let us consider first our immediate superiors and higher executives. "Handling the boss" intelligently is truly a science and an art in which unfortunately too few persons are adept. The science is the "knowing how" and the art is the "technique of execution." To be efficient in this phase of human relations, the individual must be a constant student of the temperament, moods, methods and ambitions of the "boss." He must direct his efforts and pattern his operations in accordance with the known wishes and the desired objectives of his superior. I do not

[2] Hart, L. C., "Human Relations in the Office," *Annual Proceedings*, 1944, National Office Management Association, p. 62.

imply by this statement any semblance of "apple polishing." No real executive respects a "yes" man. But I do mean that there is always a proper time and method or avenue of "approach." Gage the proper time and select the logical method as the result of intelligent study, thereby eliminating or circumventing the numerous obstacles so likely to be encountered when the "approach" is made in careless or haphazard fashion. Intelligent planning and execution accomplish amazing results in obtaining executive approval of known desirable proposals.

Undoubtedly the most fascinating phase of human relations is the technique of handling subordinate personnel. This does, at least, present the best opportunity for management to make a truly valuable contribution to employee welfare as well as to serve mankind in general.

It is commonly recognized that problems in supervisor-employee relationships multiply as companies grow larger. Aside from the material complications which result from physical and mechanical problems encountered, it is agreed that a basic difficulty springs from the treatment of employees as groups and not as individuals. If successful relations with subordinates has a single theme, it may be well to remember to establish relations with each of your subordinates and not all of your subordinates.

The Training Within Industry Service,[3] which has been referred to, produced a bulletin which is quoted here in its entirety as an example of the type of outline that has been used in various forms by many companies in pointing out to supervisors the importance of Job Relations:

How to Improve Job Relations

You know how important it is not to have any lost production because of misunderstandings on the job, or because someone is slowed down on his job by things that happened off the job.

Experienced supervisors who have demonstrated their ability to "work well with people" have developed a special skill. You can acquire this skill. By making use of it, you can be more sure of meeting your production requirements.

Everyday Problems

Does anyone in your department ever refuse to do some particular job? Or, maybe, even quit his job? Do you have any people who are discouraged, or who make other people dissatisfied?

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[3] Established as a branch of the War Manpower Commission during the war, this organization has been incorporated as a private company in the state of New Jersey and is carrying on as a consulting firm serving private industry on training matters.

Treating People as Individuals

While these foundations apply to all people, you cannot let it go at "treating them all alike." No one wants to be known simply as a number or as "the new man"—neither you nor those you supervise. We are all different. What happens to one clerk off the job makes him different from his partner on the same job. Each of us wants to be known for his own personal characteristics. There are things that *you* feel are important to *you* as an individual. You must remember other individuals feel the same way.

The Skill of Understanding People

Applying these foundations of good employee-supervisor relations will not guarantee smooth operation for you, but will prevent many misunderstandings.

However, there are other things which you must consider. You need to know each individual employee and what is important to him. You need to know your people for everyday operation of your department, and you particularly need this information when you have a difficult situation to handle as a job relations problem.

How to Handle a Problem

Because changes do occur, and problems do arise, you need to have skill in handling the situations which are within your responsibility. Often you are on the spot and you feel you must do something immediately. Hasty action may mean that you have a more difficult situation to handle later. When a problem arises, consider these steps as the outline for action:

1. Get the facts—be sure you have the whole story.
2. Weigh and decide—don't jump to conclusions.
3. Take action—don't pass the buck.
4. Check results—did your action get the desired result?

1. Get the facts. Problems may come up because of something that happens at the moment, but you need to get the whole background. Some of it will be made up of facts about the employee—his age, length of service, and experience on this job.

You will need, of course, to take into consideration both the office rules and just "the way things are done here."

Remember in getting the facts you may think you know the person quite well, but if you classify him as a "good fellow" or a "chronic kicker," you are not really looking at an individual person. You must regard him as a person who is different from every other person in the department in every single aspect whether by a very slight or a very great degree.

As a supervisor, you must know what that man thinks and feels about

himself and the people around him. Find out what the man wants—is he able or willing to express it—and what does he think should be done? and *why?* The experienced supervisor knows that he must also consider such other factors as health and working conditions which may be affecting the man.

If more than one person is involved, you must go through the same fact-finding steps for each person. Before you can plan what to do, you must be sure you really have the whole story.

2. Weigh and decide. All these facts must be assembled and considered together. When all the factors are brought together, fitted in, and considered in the light of their relations to each other, many times the right answer almost "jumps out." The wise thing to do becomes clearer.

Certainly you, the man on the spot, are in the *best* place to know the *right* thing to do, for you have the most complete picture of the assembled facts. If you jump to conclusions, you make poor use of your strategic position. When you act without evaluating the whole situation you are likely to have more difficult problems to handle later.

3. Take action. While jumping to conclusions is a poor way to handle supervisory problems, putting off action may be equally unfortunate. A supervisor cannot "pass the buck" or he, himself, will be by-passed.

However, it is not "passing the buck" to recognize after full consideration of the problem that there are some situations which you cannot handle yourself. You also make a decision and take action when you size up a situation as one on which you need help, or recognize one which is not within your own job to handle and see that it is passed on to the person who does have the responsibility and authority.

In any action, timing must be considered—the wrong "time" can make it the wrong thing to do.

4. Check results. You must determine whether your action worked. If it did not, you must re-examine the whole situation and attempt to find what of importance you overlooked. Checking the results of action is necessary in every situation because conditions change, and what worked with one individual will not necessarily work with another.

Good Supervision

One of the hardest parts of your job is that of giving consideration to the importance of people in a problem situation and knowing what is important to each individual person. This is not simply a matter of determining what is right or wrong, or deciding what is just or unjust, but is a practical approach to effective supervision. It may be thought to take too much time but day-by-day use of this skill in dealing with people will save you time in the long run.

The General Motors Corp. has produced a pamphlet which includes the material presented at a series of meetings for supervisors and executives. That this approach to good employee relations

for supervisors stresses the same fundamentals is evident from the following: [4]

I am convinced that the supervisor's greatest opportunity for progress and advancement today lies in improving his ability to meet on some common ground with each individual in the group for which he is responsible. In learning to know the individual inside and out, he must keep close enough to him to know the changes which affect him, and then deal with him, man to man on the job.

I wouldn't be surprised if we discovered that most of our problems with employees today have come about as a result of employees thinking of their supervisors and management in terms of THEY, and of supervisors and management thinking of employees in terms of THEY.

In view of every normal human being's need to be recognized as an individual before he can be and do his best, employees who fail to get such recognition from their employers will get it elsewhere. And their loyalty is bound to go to those who provide that recognition.

Recognizing their own replaceability and the insecurity it implies, failing to see in their repetitive tasks opportunity for promotion through service, these employees are easily influenced by outsiders who offer them the recognition, security and personal gain they are told they cannot get as individuals.

Under present conditions our value as supervisors depends largely upon our ability to develop a mutually satisfactory personal relationship with each and every employee entrusted to our leadership, regardless of the kind of person he is, his disposition, background, affiliations, qualifications, attitudes, condition, and relative worth or standing.

This important personal relationship can be developed only through frequent and regular person-to-person contacts with all employees regardless of the nature of their work or the other demands on the supervisor's time.

To win the respect and loyalty of all our employees we must recognize the best effort of every employee even though that best can be duplicated by the majority.

To win the respect and loyalty of all our employees we must approach each as a fellow human being expecting the best.

To make the most of our person-to-person contacts with our people we must learn how to listen.

No supervisor will ever win the respect and loyalty of all his people if he loses control of his temper.

To work effectively with and through the widely differing individuals who report to us we must learn to know each and every employee like a book, from cover to cover, inside and out—his personality, peculiarities, interests, ambitions, values, his ever-changing state of mind, feeling, health and condition.

You will recall our definition of behavior (the cause and cure of all

[4] Lee, R. L., *Man to Man on the Job*, General Motors Corp.

J. Are supervisors
   1. Instructed in labor policies
   2. Kept fully informed of company plans and policies
   3. Consulted in formulating labor policies
   4. Consulted in negotiating new labor agreements
   5. Instructed in techniques of dealing with veterans
   6. Informed about changes before notice is given to the employees?

K. Does top management participate in supervisory education and social activities?

Every successful plan of office management must provide supervision, and supervision requires the development of leadership.

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Index

A

Absence, causes of, 399
Accounting machines, 97
Accounts, expense, 203
Adding machines, 97
Addressing machines, 112
Administration, salary, 421
Advertising:
  activities, 213
  agency, 212
  literature, stock record of, 226
  place of in business organizations, 211
  rates, records of, 218
  results, checking, 219
  results, record of, 219
Agencies:
  advertising, 212
  employment, 365
Air conditioning, 57
American Brake Shoe Co., 241
American Management Association, 7, 68
American Type Founders, Inc., 176
Anderson, H. B., 226
Appliances (*see* Equipment *and* Machines), 79
Application blanks, 372
Aspley, J. C., 390
Association of National Advertisers, Inc., 213
Atwater, C. B., 265

B

Babcock & Wilcox Company, 123
Barrett, J. H., 332
Bibliography, 459
Billing:
  machines, 97
  procedure, at Grove Laboratories, Inc., 190
Blackburn, W. J., 296
Bookkeeping machines, 97
Branch offices:
  classification of, 264
  management, 263
  methods of Liberty Mutual Insurance Company, 265
  methods of Retail Credit Company, 269
  types of organization, 264
Buckley, G., 241
Budgets, 336
  procedure in American Mutual Liability Insurance Co., 354
Building:
  erecting, 33
  facilities, 48
  renting, 34
  selection of, 38
  size and shape of, 47
  windowless, 50
Bulletin boards, 406
Business, five basic divisions of, 12
Byers, A. M., Company, 226

C

Calculating machines, 97
Callahan, J. P., 46
Carson, Pirie, Scott and Co., 273
Cash registers, 98
Catalogues, 239
Center, C. I., 93
Centralization:
  advantages of, 19
  disadvantages of, 20
Chairs, 94
Chapin, A. F., 250
Check-handling machines 99
Chicago Bureau of Filing and Indexing, 132
Classification of jobs, 568
Coat rooms, 48
Collection department, information needed by, 256
Collection of accounts, 255
Color, 55
Commerce and Industry Association of N. Y., Inc., 400
Committee idea in organization, 17
Communicating system, 58
Company library, 403
Compensation, 420
Conarroe, E. H., 84, 85
Controllers Institute of America, 7
Cooper, A. M., 10
Cornell, W. B., 15
Correspondence, 141
  manuals, 154
Cosgrove, R. C., 2

O'Toole, E. F., 330
Overtime, 399
Owens-Illinois Glass Co., 278

P

Papers:
  methods of controlling, 125
  standard sizes of, 297
Partitions, 58
Paul, E. A., 288
Peak, G. W., 299
Pennicke, H. C., 71
Pensions, 413
Personnel:
  department, activities of, 360
  records, 378
  requisition, 362
Physical examinations, 367
Physical factors, 61
  importance of, 47
Pierce, J. F., 194
Place of office manager in organization, 21
Pre-employment tests, 367
Private:
  offices, 66
  secretary, 141
Procurement, essential steps of, 232
Professional status of office manager, 6
Promotion, 389
Prospect records, 197, 215
Prudential Insurance Company of America, 136, 164
Purchase order, 240
Purchasing:
  office management and, 243
  scope of, 229
  procedure, summary of, 241

Q

Qualifications of an office manager, 8
Quotations, 240

R

Railings, 58
Reception clerk, 172
Records:
  analysis, 31
  classification of, 134
  customer's, 198
  employment, 372
  increasing use of, 5
  of advertising rates, 218
  of advertising results, 219
  of credit department, 250
Records (*Cont.*):
  of labor turnover, 373
  personnel, 378
  sales department, 196
  schedule for retention of, 132
  territorial, 202
  used in retail credit management, 258
Reflection factors, 53
Remick, E. W., Jr., 354
Reports, 316
  administrative and executive, 322
  eliminating unnecessary, 329
  fundamentals of preparation, 316
  office manager's annual, 323
  periodic, 319
  salesmen's, 197
  special, 325
Reproduction:
  equipment, 100
  problems, 101
  processes, 101
    automatic typewriter, 103
    carbon paper, 103
    contact printing dry and wet processes, 110, 111
    hectograph, 106
    impression stamps, 111
    offset, planography, 108
    photography, 110
    relief duplicating and printing, 107
    stencil duplicating, 107
Requisition, 232
Rest periods, 403
Retail Credit Company, 269
Retirement plans, 413
Revere Copper & Brass, Inc., 427
Robinson, E. M., 254
Rockefeller Center, cleaning activity in, 62
Route cards, 202

S

Salary administration:
  need for, 421
  fundamental principles of, 421
Sales:
  estimates, 204
  quotas of Maremont Automotive Products, Inc., 204
Sales department, organization of, 196
Sales promotion, A. M. Byers Company, 226
Sales records, Majestic Manufacturing Company, 200
Salesmen's reports, 197
Scientific management, 14
Secretary, private, 141
Servel, Inc., 309